

Guidebook of

Somatic Transformational Exercises

*improving the mind-body connection
to improve physical and mental prowess*

FROM THE LINEAGES OF . . .



Hanna Somatic Education®

and complementary others ...

OCTOBER, 1999 EDITION

CDs inside back cover

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INTRODUCTION

This handbook exists to enable you to improve your physical and mental prowess by improving your mind-body connection.

Those of us who have worked with the processes described in this book have found that as we combine certain movements together, our strength instantly increases. We have also found that as we do these processes with steadier attention and focused intention, our quality of movement in general becomes smoother and surer. These improvements result from a higher level of mind-body integration.

So the transformative processes described here do more than improve bodily functioning; they also improve mental functioning by exercising your ability to convert ideas (words and instructions) into tangible actions with tangible results. You get results according to how accurately you do so. Take your time.

The influence of Thomas Hanna, the author of Somatics: Re-awakening the Mind's Control of Movement, Flexibility and Health, may be recognized by those who have read his book. I was one of Dr. Hanna's direct students. One of Dr. Hanna's invitations was to explore. This guidebook contains discoveries made in the spirit of such exploration and also some of the somatic exercises he taught us, his students. It also contains technical guidance that, applied to the Cat Stretch exercises of Dr. Hanna's book, magnifies their potency. I welcome your feedback.

This volume stands as the counterpart of another curiosity-evoking work, The Handbook of Assisted Pandiculation, a book of clinical techniques developed and written for use by professional (clinical) practitioners of Hanna Somatic Education. It is available to formal students in training, and relevant parts are available to participants in experiential workshops.

This volume is for everyone. However, clinicians in other disciplines may find that the somatic transformations taught here open a new vista for understanding and working with persistent musculo-skeletal conditions and refractory pain. Somatic educators-in-training may use them to accelerate their development and add them to their vocabulary of somatic transformations.

The material contained in this work resides within the domain of the body-mind – but its source lies beyond. The somatic transformational exercises will take you to a doorway to a *greater* process of individual transformation, which can be carried forward by means of resources found at the end of this guidebook.

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GUIDEBOOK OF SOMATIC TRANSFORMATIONAL EXERCISES
WEDNESDAY, MAY 26, 1999

FOREWORD

New Paradigm Healing -- Somatic Education

W*hat in the **world** is a **paradigm**?*

A paradigm is a set of criteria we use to define what's important and to determine how to do things. A paradigm is a viewpoint and a set of rules.

We all use paradigms -- for example, about food: we all have ideas of what we like and don't like, which foods are good for us and which are not. For some people, calories are important, for others, nutritional balance, and for others, life-force. Those differences define different "food paradigms".

The healing professions are also built upon paradigms: germ theory, structural alignment, energy flow, etc.

Now, a new healing paradigm is emerging: somatic education. The paradigm of somatic education involves improving control over our own life process -- the mind-body connection.

The term, "somatic", refers to the awareness of the body "from within"; "education" has to do with awakening capacities. The mind-body connection involved in somatic education is the same mind-body connection involved in controlling our own movements, our own attention, our speech, and ultimately, our state of tension in life.

Somatic education produces results particularly effectively with the residual effects of injuries (chronic pain and stiffness) and with ***stress-related*** disorders (such as headaches and back trouble).

PARADIGMS OF HEALTH CARE

Health care has changed over the centuries, yet one aspect of healing has remained the same: the body heals itself, whatever other treatment may have been given.

In other words, there are **some** things that no one can do for us; we must do them ourselves.

The shift from medicine-as-intervention to self-healing is a paradigm shift -- and with paradigm shifts come new rules.

Two healing paradigms *immediately* preceded the emergence of the somatic paradigm: those of modern medicine (drugs and surgery, and only primitively, exercise and diet) and of bodywork (manipulation, exercise and diet, but not drugs and surgery!).

THE MODERN MEDICAL PARADIGM

“Medicine conquers disease and repairs the body.”

The operating paradigm of modern medicine is that the human body is a “marvelous machine” that occasionally malfunctions and needs fixing. This is its basic viewpoint. The rules of manipulative intervention used in the various branches of modern medicine, which include drugs, surgery, and most physical therapy practices, emerged from this view. So also did those of osteopathy, chiropractic, massage, reflexology, trigger-point techniques, and the use of herbs.

Here, mind and the body are considered separately, as if they are two things that we experience at different times. Their relationship is considered somehow mysterious and arcane. But how could it be more obvious? Every voluntary movement we make is a bodily action governed by a mental intention, speech is a physical expression of a feeling mind, and emotional states correlate with muscular tension, movement and bodily chemistry (hormonal changes). Direct self-observation of body and mind reveals that to feel one is to feel the other. Both mind and body are sensations. Sophisticated practitioners of modern medicine recognize and work with that interrelation.

In modern medicine, the individual's responsibility for healing may be summarized, “take your medicine, do what your therapist says to do, watch your diet, and exercise.”

There is an ongoing problem with modern medicine, however: patient “compliance”. People don’t necessarily do what their doctors tell them to do. This problem bids one become philosophical. Is it that people place too much responsibility upon their doctors and take too little upon themselves (the “fix me” mentality)? Or is it that the methods of modern medicine are so often unpleasant (drug side-effects, painful and invasive procedures, and austere dietary prescriptions) that nobody likes them? Or both? Might it be that people must deny or suppress their feelings to tolerate the methods of modern medicine, an unnatural act for any living creature?

Still, for emergency situations (which often result from patients’ lifestyle choices), modern medicine is often the necessary first approach.

THE PARADIGM OF BODYWORK

“Body affects mind.”

The operating viewpoint of various schools of bodywork, such as Rolfing®, Cranio-sacral Therapy, The Trager Approach®, and others, is that body and mind are, in reality, “body-mind”, a functional unity. Certain Asian health practices (including acupuncture) use the relation of mind and body as a diagnostic reference in determining treatment. Even so, where actual application of the method is concerned, it is essentially manipulative; the individual is, for the most part “on the receiving end” -- “done to”, manipulated by an outside agent -- though some approaches include pleasurable health practices as part of their recommended regimen.

Still, even in these approaches, patient compliance is a problem -- possibly because people have been so indoctrinated by their previous medical experiences that they bring their indoctrination (the “fix me” mentality) to their bodywork practitioner. In fact, the notion of “compliance” is a problem; *compliance* implies *obedience*, rather than self-generated assumption of responsibility. Part of the task of practitioners of these methods is educating their clients as to their responsibility for their own success.

This leads us to the emerging paradigm.

THE PARADIGM OF SOMATIC EDUCATION

“I am as I decide to be.”

The primary observation of somatic education is that how we respond and adapt to the insults and injuries of life largely determines how they affect us, both in the short term and in the long term. We have a major say in the course of our own healing. The rule governing this viewpoint is, “release reactions that are no longer necessary and instill abilities that serve us.” Create freedom from the past and apply that freedom into free and regenerative patterns of feeling and function.

With somatic education, the individual learns to correct bodily malfunctions through an internalized learning process. This process is not so esoteric as it might seem. Major bodily systems affecting health and healing (breathing, digestion, circulation) are affected by a system over which we have virtually unlimited potential for voluntary control: our musculo-skeletal system. Our emotional states are also tied in with that system.

Somatic education involves a kind of awakening. What gets awakened is the capacity to feel what is going on with us and to bring it under our control. We make “it” (pain, tension, breathing, etc.) into “ourselves”. Integration occurs. Then, when we stop doing “it”, “it” stops happening. We seem miraculously freed of the affliction.

Participants in somatic education voluntarily place attention in the feelings of voluntary movement; they create changes actively, rather than receive them passively; at first guided by a teacher, they then proceed guided by their own awareness of themselves and the effects of their actions. The effects are indeed far-reaching.

With certain conditions, such as chronic pain following injury, this approach is the only way that works in the long run. When a person has accumulated nervous tension from injuries, long-term stress, or the emotional and attitudinal conditioning that occurs over a lifetime, muscles can become so tight that they hurt. Spasms occur. Joints get compressed by those muscle pulls. Nerves get pinched. Breathing and physiological functions get impaired. Posture gets distorted. People suffer “body aches”. They “age”. However, there is nothing wrong with their muscles; they are working as they should. They are only obeying the nervous system. The problems that result can be reversed only *by doing something different*.

Feldenkrais Awareness through Movement exercises, Rolfing® Movement, biofeedback, Aston Patterning® Neurokinetics, Continuum Movement®, Hanna Somatic Education™, and schools of yoga that go beyond stretching and relaxation, consciously awaken the self-determining, self-correcting link between self-awareness and self-control.

Each healing paradigm has its area of superiority. The superiority of somatic education is its ability to alleviate conditions that arise from the individual’s habitual way of functioning, something that only the individual can correct -- often attributed to aging, mysterious causes, or even to genetics. Somatic education operates from a new paradigm that makes it possible to resolve conditions unresolvable by medical or manipulative means: self-awareness and self-mastery. You learn how to be more effective at being as you decide to be.

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HELPFUL INTRODUCTORY IDEAS

The following few pages make it easier to use this guidebook. By understanding a few basic things, you align yourself with a way of thinking about Somatics that helps you to produce results faster and more easily.

On Control and Ease

The word, control, has about it a sense of effort and rigidity. This appreciation of the word is precisely the opposite of its meaning.

The sense of effort is precisely what is absent from a high degree of control. The better the control, the greater the ease. *Poor control* is experienced as effort.

The masters of any art always make it look easy. That is the definition of mastery and the very sign of their mastery.

The novice, whose control errs and falters, struggles.

Control is ease.

However, there is a peculiarity of perception that occurs when people consider something that is momentarily beyond their reach: they perceive the obstacles between how they are and how they would have *to be* to get that “something”. That sense of obstacles colors their sense of what it would be like to achieve their goal. They erroneously identify the achievement of their goal with the feeling of their current obstacles, and they assume that anyone who has reached that goal is experiencing those obstacles.

Thus, the control of mastery seems to be an effort -- whereas it is *getting to that degree of mastery* that involves some effort.

Thus, people disparage control.

This disparagement is the mood of discouragement.

But control is ease. Therefore, it is better to imagine mastery as ease -- and to understand the learning of control as the movement toward ease.

Thus will the tensions of excessive effort and struggle be seen as unnecessary and released, and the way to mastery be paved with truly good intentions.

Why “Slowly”?

Doing things at the usual speed, we tend to do them in the usual way.

The whole point of these explorations is to do something in a *new* way: move.

You may have noticed that you can’t see much detail in things that are moving quickly; it’s much easier to see the details of things that are holding still or moving slowly.

The same is true of your body-image.

In the case of these movement explorations, the slower you move, the more time you have for details to “fade in” to your perceptions. In other words, you will not necessarily perceive the restrictions and habitual tensions of your usual way of moving immediately, during a movement. However, if you slow down and *pay attention to the sensation of movement*, you will discover the ways in which you hold unnecessary tension during movement. You may even discover that you are holding tension that *directly interferes* with the movement you are doing.

At that point, you can use the “Feathering” technique (page 6) to release those interfering tensions. As you do, you will notice your movement getting smoother, feeling more elegant and under your control.

Try going slower with each repetition, maintaining the smoothness of the movement.

At the beginning of this explanation were the words, “The whole point of these explorations is to do something in a *new* way: move.” Those words are, at this moment, an abstract generality to you; they don’t have much meaning. Their meaning will be obvious once you start the movement explorations.

Here’s another set of words that will have meaning once you start the movement explorations: *INTEND, ALLOW, DO*.

That means, “Know exactly what you **INTEND** to do, get the distinct feeling of **ALLOWING** yourself to do it (relax into doing it), and **then**, **DO** it.

What You Need and How Best to Use This Guidebook

The somatic transformations are intended to be done in the sequence in which they appear. To do them, you need floor space of about six-by-nine feet and a pad (blanket, yoga mat, quilt) soft enough for you to lie on in comfort. Arrange to be undisturbed for about half an hour.

1. Read through each instruction until you have an idea what to do.
2. Do the exploration as you remember it.
3. Re-read the instructions for clarification.
4. Re-do the exploration.

Ideally, have somebody read the instructions to you. Some people record them on audio-tape (pacing is important) or form a practice group!

In general, the earlier transformations prepare you for those that follow. *Do each new transformation several times within a week until you get a satisfactory change, before moving on.* If a transformation seems difficult or painful, go more slowly and more gently. If necessary, do an earlier one that deals with your limitation.

Many of the transformations have several stages of integration (levels of complexity). Do the simplest versions (numbered) first; then add the more advanced integrations (indented), as follows:

1. (main instruction, basic level)
⇒ addition (intermediate level)
⇒ addition (more advanced level)

To get the most benefit from a somatic transformation, go slowly enough to sense the movement as you do it, gently enough to be comfortable, and using only the muscles needed to accomplish each movement*. That way, you will continually uncover patterns of tension you have held without awareness and be able to release them into a greater grace and freedom.

Note: Unlike conventional postural training, you do not need to maintain good posture to have good posture after doing these explorations. Your posture will improve naturally. *Do not hold “good posture”, as it only adds tension to your other habitual tensions. If anything, relax into good posture.*

* See the instructions for “Feathering” on the page shown in the Table of Contents

The Special Use of Language in this Guidebook

In the instructions, certain terms have specific meanings, as follows:

backward = toward your back

underside = the side on which you are lying or sitting

topside = your uppermost side in relation to the Earth

slowly = slowly enough to feel your movement continuously as you move

gently = two “notches” more gently than you think of as gentle, but with enough effort to feel what you are doing

smoothly = without sudden movements or loss of control

Pause and feel. = Stop moving, and in the position you are in, feel your muscles at work.

Feel what’s working. = Notice the sensation of muscles working.

where the movement comes from = as you move, the location of the most vivid sensation of movement

The very practical reason for this choice of language is so you have an easier time understanding the instructions. Nearly all of these movements are exotic and unfamiliar. We want to make it as easy as possible for you to learn them!

PAUSE AND RELAX -- another relaxation technique

This is another technique for reducing effort in movement.

As you do any of the movements in this Guidebook, you may pause in place, scan the whole body for extra tension, and relax it. You will often undergo a postural shift and experience a feeling of sudden, additional mental clarity.

Review “INTEND, ALLOW, DO” in “WHY SLOWLY?” (page 3).

THE “FEATHERING” TECHNIQUE

Typically, people use much more effort to do a movement than is necessary by involving muscles that are unnecessary for the movement. Such inefficient movement contributes strain to movement and to living. The Learning Explorations found in this Guidebook provide ideal opportunities to develop more efficient, easier movement. One technique to do so is called, “feathering”. It’s called that because you use it to locate the edges of restrictions to movement with the delicacy of a feather.

In a nutshell, it works this way: When doing certain movements, you will notice that as you reach a certain position (unique to you), you must apply more effort to continue moving. You have encountered a **restriction** to movement -- a restriction created, in many cases, by tension held somewhere in the body, usually without awareness and in an unsuspected area. At that point in the exploration, do the “feathering” technique.

The “Feathering” Technique

1. Back off from the position of restriction, then slowly resume movement toward the restriction and *notice the exact position at which you first sense it*.
2. *Back off, again*. Reapproach, again sensing the edge of the restriction with the delicacy of a feather.

Repeat until you have a clear sense of where you first encounter restriction.

3. Now, find the edge and pause. Scan the whole body for tension, the tension of effort.
4. Relax anything you find that is more than needed to do the simple movement you intend.

At that point, the restriction to movement will have disappeared or moved. Continue the movement past the point at which you stopped to do the “feathering” technique, as your newfound freedom permits.

THE “TEASING” TECHNIQUE

The purpose of all of the somatic transformations is to awaken you to your muscular system. This process involves both awareness and control.

It is typical of human beings to have only crudely developed control of the effort or speed of a movement. Hence, the meaning of the word, “gentle”, is nebulous for many of us and equated with “weakness” by others.

It is also typical that people have only a vague sense of how to move to reach (or use) certain muscles.

Finally, by using too much force or effort, people fail to sense the subtle tensions that maintain habitual postures. Too much force produces too much sensation, which drowns out the subtler sensations of habitual postures.

The Teasing technique accomplishes three purposes. It:

- enables you to locate areas of your muscular system with precision movements that engage more and more of the body.
- develops finer control over effort and speed of movement.
- enables you to release patterns of tension that are otherwise beyond reach of your awareness.

You can use this technique with any of the explorations given here. There is also a special section on movement patterns for which The Teasing Technique is particularly applicable.

The technique has three stages:

1. Locate a place where you have tension or discomfort.
2. Learn how to move to tighten that place deliberately.
3. In a series of contractions, tighten and relax at a gradually decreasing level of intensity until you experience a postural release.

More detailed instructions follow, immediately below.

The “Teasing” Technique

1. Locate a place where you have discomfort you would like to erase.
2. Tighten the area and notice how you move.
3. Relax the effort.
4. Tighten and release repeatedly until you can feel the sensation increase and decrease.
5. With each cycle of tightening and releasing, notice what body parts move and deliberately add them to the action of tightening and releasing.
You will notice that your ability to tighten gets considerably stronger.
6. When you are capable of a strong contraction, contract and hold.
Notice the amount of effort you are exerting.
7. Release and then re-tighten less, though enough to feel the area distinctly.
8. *Slowly* release the area, maintaining continuous awareness of the decreasing tension.
9. Repeat tightening and releasing and decreasing levels of effort until you experience a postural release.

SUGGESTION: Use this technique for “Opening the Dark Vise”, Breathing section, page 21.

Posture, Structure, and the Sense of Self: the Role of Expanded Perception

Upon what are bodyworkers and chiropractors working when they seek to improve body alignment and bodily functioning?

This question has at least two answers:

- living tissue
- the person's self-sense

The first answer is obvious and needs no comment.

The second answer deserves a closer look.

The body is a self-organizing system. That's what "organism" means.

How do we maintain organization? By feeling our condition -- hunger, desire, etc., and acting accordingly, in mostly learned ways. An organisms, we are self-aware and self-regulating. To organize ourselves is to direct ourselves.

So, when a bodyworker or chiropractor induces a bodily change, that change affects our feeling of ourselves, our self-sense. The change itself remains subject to our acceptance or rejection of that altered self-sense.

But there is another factor to take into account: Is our perception of ourselves accurate or distorted?

The question is as legitimate in matters of the body as it is in matters of personality. Both are matters of feeling and dependent upon the perceptiveness of the perceiver.

It so happens that when a person is used to feeling a certain way, they are habituated, in effect, to choosing that way over others. They highlight certain sensations (by paying attention to them) and overlook or reject others, just as they choose one course of action over another.

That being the case, there are no guarantees that they have selected an optimal way of being healthy, happy, or of fulfilling any other goal. In general, it is the opposite; they have selected what they know, and what they know has brought them to a care-giver. They want want change, but they do no know

what it entails, nor do they know if they would be willing to make the change if they did know! Some people want to be “fixed” so they can go back to what they’ve always been doing, with nothing new added!

As to the ministrations of bodyworkers and other manipulative therapists, regardless of whether they have instilled a better functional pattern, it is up to the person to maintain it. Given the clients’ distorted perception and habits of action, how are they going to do it?

You have at least one part of the answer: Their perception must change. In addition, their way of maintaining themselves must change -- and that cannot be done for them; they must set a new intention and get used to new feelings.

These two kinds of change -- perception and action -- arise from the person’s own self-sense and intention.

Intention is not a mental thing; it is a felt thing, like chewing or breathing.

Both a person’s perception of themselves-in-action and their choice of action must change.

That cannot be accomplished only through manipulation from without; it can only be aided by it. The person’s sense of order (and self) is pre-eminent. We must learn and choose to do something new or remain chronically in distress and dependent.

Functional Symmetry Opens a Mysterious Channel for the Exercise of the Will

Balance and symmetry correspond to the state of rest in individuals.

Imbalance and asymmetry correspond to activity.

How is this so?

Balance, particularly static balance, exists when all forces (or tendencies to go into motion) counteract each other. For human beings in a standing or sitting position, this state of static balance can exist only when the left and right sides mirror each other both in how they appear and in how they feel. Unequal tensions and positioning of the two sides result in a displacement of the body's center of gravity away from its center of support -- leading to motion, as when a person leans forward slightly when initiating walking.

This movement from symmetry to asymmetry leads to movement, in general. Walking is inherently asymmetrical; even at the point of greatest balance, the center of gravity is slightly away from the center of support -- if only because one's attention is extended outward (attention leads movement).

This understanding should inform somatic educators, bodyworkers, and those who partake of those practices.

Most people are substantially asymmetrical, both posturally and in their control of movement; they are unable to come very close to rest at symmetrical balance. The tendency they have to go into motion, they must counter constantly with various forms of tension. This constant activity of their nervous system (visible as wavering) sets up a constant disturbance in their attention; it wavers. Their nervous system is noisy. They are not at rest, either physically, or mentally. On the other hand, steady attention gives the will a channel through which to operate. (Is this fact not self-evident?)

So there is a virtue in cultivating symmetry and balance.

Now, what does this state of symmetry and balance do to a person's way of moving?

This brings up an interesting point. To move, they go from static balance (symmetry) to *dynamic* balance.

The term may seem a bit difficult to understand. Let's use an analogy. Have you ever considered how odd it is that whether you stand still or whether you move, you still seem to be "here"? Your sense of "here" doesn't move, no matter how fast you go! This is dynamic "hereness"!

Dynamic balance is similar. One more thing, however: your ability to feel "here" has to do with freedom from distraction by your own mind. The steadier your attention is, the more "here" you feel. That steadiness of attention has much to do with symmetrical control of movement (dynamic balance). Without it, a person always feels awkward and self-conscious because they feel physically out of balance and in some danger of losing their balance. They have to keep their attention, to one degree or another, upon themselves.

Getting back to the relationship between balance and steadiness of attention, a person who has developed symmetry of both posture and control of movement has developed a kind of steadiness of attention experienced as "hereness" or "here-and-now-ness". If they have not developed right/left, symmetrical control of movement, then they can experience steady attention and a sense of control only when they are at rest. They have limited dynamic balance.

For that reason, the notion of "alignment" has limited value. No one can maintain their alignment when in movement because movement is inherently asymmetrical and out of alignment with the rest (symmetrical) condition. The answer is symmetrical coordination -- that is, equal coordination and equal facility with the left and right sides of the body. Then, a person's attention can be steadier, even when they are in motion.

One more thing: An odd thing happens when a person attains physical symmetry, even momentarily (a process to be discussed technically, at another time): their mind falls silent. The forces of left and right equalize each other, and with that, the movement of attention into the stresses of biased opinions ends. It is a movement to a more profound balance and deeper peace.

So, how do we experience/recognize symmetry? We start from rest. As you lie on your back, do your shoulders touch the floor equally? Do your legs lie the same way?

If not, you have habitual, asymmetrical tension. Your position is distorted by muscular pulls. You are not as much at rest as you might be.

Your movement toward symmetry will involve learning to locate and to release that habitual tension. That's one thing the somatic learning exercises are good for.

As you practice them, notice where you feel the sensations. As you practice on the opposite side, locate or imagine the mirror image sensations on that side, also. This act is called "sensation location".

For symmetrical movements, like the Arch & Curl, adjust your movements and pacing to create symmetrical (right-left mirror-image) sensations.

Very often, as you do so, if you are paying enough attention and going slowly enough, you will discover tension at some third place in the body. As you relax that third place, you will experience a postural adjustment toward greater symmetry and your mind will clear.

This act is called "symmetrical execution".

So, to summarize

- ◇ sensation location
- ◇ symmetrical execution
- ◇ release of the 3rd point

To the degree that you develop symmetry, your balance will improve, your mind will clear, and your will will have a clear channel through which to operate.

So, cultivate right-left symmetry; get as good with one side as with the other. Develop and enjoy balance and functional symmetry.

Re-read this entire article for a more complete understanding.

INTRODUCTORY DEMONSTRATION

This maneuver quickly demonstrates how learning to sense and control movement increases flexibility in ways previously thought only obtainable by stretching. Its message: *This works, and you can do it!*

Basic Demonstration

STARTING POSITION: standing with feet at shoulder-width, legs straight

Bend over and notice how far your hands hang from the floor. Tap your shins with your fingertips where they hang.

1. Reach outward beyond your head, parallel to the floor, with elbows straight.
2. Still hanging, look up with your eyes and tip your head back.
3. Raise your arms higher.
⇒ Match the effort of raising your arms and tipping your head.
4. Tip your head back further.
⇒ Match the effort of raising your arms and tipping your head.
5. Thrust your belly out to arch your spine.
⇒ Match the effort of arching your spine and tipping your head.
6. When all efforts match, take a deep breath.
7. Slow-w-w-ly exhale and hang down.

Now, tap your shins and notice where your fingertips are.

NOTES

COORDINATING MOVEMENT AND BREATHING

Breathing *introductory ideas*

Breathing problems often involve arrested (or restricted) **movements** of breathing, rather than problems with the lungs, only. The muscles involved—the diaphragm, the abdominal muscles, the pectoral muscles at the front of the chest, and the muscles that move the ribs (including the scalene muscles of the neck) -- hold residual tension. As a result, people either exhale incompletely or inhale incompletely.

Instruction for improving breathing often emphasizes abdominal breathing. This instruction is important for people who have developed the habit of holding their belly tight; a “tight gut” reduces breathing capacity and increases the load on the heart. However, breathing involves more than the diaphragm; it also involves the inflation of the rib cage. Therefore, it is also necessary that the ribs move freely and that the neck be free of habitual tension. To hold the ribs immobile to breathe with the diaphragm reduces breathing capacity and adds stress to the body; tight neck muscles pull up on the ribs and reduce the ability to exhale.

Free breathing looks like inflation of the entire torso and *feels like* inflation of the entire body. If this is not your experience, feel where the restrictions are as you inhale if you can, then choose transformations that enable you to relax those restrictions. If you cannot feel where your restrictions are, start with the beginning exercises.

The following transformations progressively free and coordinate the movements of breathing.

PREPARATION FOR BREATHING MANEUVERS

THE ESSENCE OF THIS MOVEMENT: slowing down and smoothing out your breathing

EXPECTED RESULTS:

- more relaxed breathing, more relaxed ribs
- longer neck, more erect posture
- a sense of calm

STARTING POSITION: lying on your back, knees up & together

If reading aloud to a partner or to a group, have people listen to the following instructions twice, as rehearsals, until they get the picture.

1. With no special effort, you notice how fully you usually inhale and how completely you exhale. **5 slow breath cycles**

Work comfortably within your capacity -- no need to force.

2. Now, you regulate the speed of your breathing:*

6 seconds to inhale, 2 second pause keeping the air in;

6 seconds to exhale, 3 second pause keeping the air out;

6 seconds inhale, 4 second pause,

6 seconds exhale, 5 second pause

6 seconds inhale, 6 second pause

Rest and breathe naturally.

Perform four (5) times, total.

* If reading/speaking aloud, say:

- Inhale ... two ... three ... (etc.) and
- Pause ... two ... (etc.) and
- Exhale ... two ... three ... (etc.) and

THE ESSENCE OF THIS MOVEMENT: gaining deliberate control of your breathing - to distinguish passive breathing from active (deliberate) breathing

EXPECTED RESULTS:

better ability:

- to feel the muscles involved in breathing
- to feel your breathing capacity (air volume)
- to exhale

STARTING POSITION: lying on your back, knees up & together

If reading aloud to a partner or to a group, have people listen to the following instructions twice, as rehearsals, until they get the picture.

If doing the exercise solo, read and remember the instructions as best you can and do the exercise once. Review the instructions before each repetition until they are clear to you.

Perform four (4) times, total.

1. With no special effort, you notice how fully you usually inhale and how completely you exhale.

2. Now, you regulate the speed of your breathing:

6 seconds to inhale passively to your usual fullness

P 2 seconds deliberately continuing to inhale *to your full capacity*

Keep the breath and let the feeling of inhaling set in.

6 seconds to exhale passively to rest

P 2 seconds deliberately continuing to exhale *to bare emptiness*

Keep your breath out and let the feeling of exhaling set in.

6 seconds to inhale passively to your usual fullness

P 3 seconds deliberately continuing to inhale *to your full capacity*

Keep the breath and let the feeling of inhaling set in.

6 seconds to exhale passively to your usual fullness

P 3 seconds deliberately continuing to exhale *to bare emptiness*

Keep your breath out and let the feeling of exhaling set in.

6 seconds to inhale passively to your usual fullness

P 4 seconds deliberately continuing to inhale *to your full capacity*

Keep the breath and let the feeling of inhaling set in.

6 seconds to exhale passively to rest

P 4 seconds deliberately continuing to exhale *to bare emptiness*

Keep your breath out and let the feeling of exhaling set in.

6 seconds to inhale passively to your usual fullness

P 5 seconds deliberately continuing to inhale *to your full capacity*

Keep the breath and let the feeling of inhaling set in.

6 seconds to exhale passively to rest

P 5 seconds deliberately continuing to exhale *to bare emptiness*

Keep your breath out and let the feeling of exhaling set in.

Rest and breathe naturally.

ARCH & CURL (T. Hanna/L. Gold/L. Contier)

THE ESSENCE OF THIS MOVEMENT: equalizing strength and smooth control of the muscles of the back of the torso, front of the torso, and breathing

effort:
of back muscles = of breathing = of muscles of front of torso

STARTING POSITION: lying on your back, knees up, feet near your buttocks, legs balanced upright

1. You interlace your fingers and place your hands behind your neck.
2. You lay your elbows out flat on the surface.

You will be doing two basic movements (arching backward and curling forward), alternating continuously, and adding details to them.

3. You arch backward: SIMULTANEOUSLY:
 - Inhale.
 - Gently and gradually arch the small of your back off the floor.
 - Press your elbows, the back of your head, and your tailbone down.

feel: pressure on
head = elbows = tailbone

feel: tension in
back of legs = muscles of shrugging = between shoulder blades

⇒ Shrug your shoulders.

Do this a few times, tightening and relaxing, until you feel it in your neck.

⇒ Pull your heels toward your buttocks by tightening the backs of your legs.

Do this a few times, tightening and relaxing, until you feel what it does to the rest of your body.

4. You curl forward: SIMULTANEOUSLY:

- Begin to exhale.
- Flatten your back by relaxing all efforts in Step #3.
- Bring your elbows together. (pause)

NOW:

- Continue to exhale.
- Point your elbows at your knees.
- Lift your head and look at your knees.
- Exhale completely.

feel: effort of
belly = chest = front of neck

⇒ Gently squeeze the sides of your head with your forearms.

⇒ Slide or push your feet away from your buttocks, to help your back flatten.

While curled:

5. You inhale until you can get no more air in.

Then, (SIMULTANEOUSLY:)

- Gently let yourself down as you **continue** to inhale.
- Spread your elbows, arch your back, and press your head down.

Cycle between arching and curling four (4) times more or until the feeling becomes more familiar to you than it was when it started.

Do these movements more gently with each repetition.

FREEING YOUR DIAPHRAGM MUSCLE

introductory ideas

The diaphragm is one of the major muscles of breathing. It is a dome-shaped muscle *above and behind* your abdominal organs and in front of your spine. It separates the contents of your abdomen from those of your chest. Its action is something like that of an umbrella opening: as it opens, it flattens; as it closes, it becomes rounder and more dome-like. By flattening, it works like a piston; it pulls out of your chest, creates space and a vacuum there, and draws air in -- you inhale. The act of inhaling pushes your belly forward, making it rounder. Exhalation begins when you relax your diaphragm; that relaxation allows your belly to flatten. Another muscle in the front of your belly, the abdominus rectus, helps you to exhale; you use it when blowing, as when you blow up a balloon or blow out birthday candles.

This set of maneuvers improves your control of your diaphragm so you can both inhale and exhale more fully and easily.

Ladies: no brassieres during these maneuvers

RIDING THE WAVE OF BREATHING

THE ESSENCE OF THE MOVEMENT: using the pressure of your belly against your hands as an example of how much force to use as your hands ride the surface of your abdomen inward during exhalation; relaxing your belly fully between inhalation and exhalation

TIME TO COMPLETION: 30 minutes (worth it)

STARTING POSITION: prone (on your belly), head turned to one side

Make fists of both hands with your fingers wrapped around your thumbs, palms facing toward your belly. Place your fists near the center of your solar plexus (the soft place under the arch of your ribs).

1. You breathe normally for a while.

⇒ Feel the movement and pressure of your belly against your fists.

This movement results from the tightening and loosening of abdominal muscles.

2. Now, you **exhale actively** to “bare empty” and feel the pressure of your belly against your fists.

3. As you relax and **inhale passively**, you maintain that firm contact of your fists against your belly.

⇒ Notice which way your belly lets your fists sink in. Follow with hand pressure in that direction.

Feel, with your belly, the pressure of your fists. You will probably notice the direction of movement change as passive inhalation continues. The movement will probably be toward your center (midline) and toward your heart. It's safe to do this. Work comfortably.

4. You continue to **inhale deliberately** and relax the pressure of your fists at the speed you inhale to permit your belly to move.

As you continue to inhale, the pressure pushing your hands out increases. You relax your hand pressure and follow the movement outward. You are feeling the pressure of your diaphragm muscle pushing forward.

⇒ Keep the amount of pressure on your belly constant as you inhale.

5. As you **exhale passively**, you follow the pressure against your fists in, as before.

You will probably notice that your fists go deeper, this time. Stay within your comfort zone.

6. As you continue to **exhale deliberately** and feel your belly harden, you relax the pressure of your fists *at the speed you exhale*, to permit your belly to move.

As you continue to exhale, the pressure pushing your hands out increases. You relax your hand pressure and follow the movement outward. You are feeling your abdominal muscles flatten the belly.

7. As you **inhale passively**, you let your belly push your fists out, again.

Continue riding the wave of pressure until you cease gaining depth. You have now relaxed your diaphragm more than usual.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: The arch of your ribs continues down and to your sides, at your waist. Separate your fists by moving them more to the sides, still on your belly right against the edge of your ribs. If you can, feel for a spot that seems a bit sore or tight and work there.

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: Separate your fists a bit more by moving them more to the sides, still on the soft part of your belly right against the edge of your ribs. If you can, find a spot that seems a bit sore or tight and work there.

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: Separate your fists again by moving them further to the sides, still on the soft part of your belly under the arch of your ribs. With your hands, compare the softness of where you've been to where you have not yet been to find a spot that seems a bit tighter. Work there.

1. Repeat the sequence of "Riding the Pressure Wave" until you cease gaining depth.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of "Riding the Pressure Wave" until you cease gaining depth.

Continue repeating this sequence with your fists moving toward your waist. When you reach your waist, stop and read the following directions.

Now, you need to trace the line of your hip bones toward your pubic bone, at the bottom center. With your hands, feel the bony prominences just below your waist line. These are your hip bones. Feel the soft region of your abdomen between them. You are about to continue the sequence in that region.

NEW POSITION: Reposition your fists a bit toward the bottom of your abdomen and slightly closer to each other, right against the edge of your hip bones.

1. Repeat the sequence of "Riding the Pressure Wave" until you cease gaining depth.

You may notice some soreness in your abdomen. Such soreness is usually nothing to be concerned about; unless you have a fever, it's probably muscular soreness. Work more slowly and more gently. Feel which way the tissue wants to move and help it move that way, as you breath. You may want to stretch your leg or bend your torso to help. Do it.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: Move your fists again by moving them closer together and closer to your pubic bone, still on the soft part of your belly against the edge of your hip bones. If you can, find a spot that seems a bit sore or tight.

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

Reposition and repeat.

NEW POSITION: Put one fist directly above your pubic bone (soft place) and the other directly below the center of your ribs (solar plexus region).

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: Now, trade positions with your fists.

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

NEW POSITION: turn your head to the other side

1. Repeat the sequence of “Riding the Pressure Wave” until you cease gaining depth.

Congratulations! You’ve completed the sequence! Now, turn on your back and enjoy the benefits! Take some breaths . . .

FREEING THE RIBS

THE ESSENCE OF THIS MOVEMENT: using breathing and pressure of your arm against your ribs to awaken awareness of what your diaphragm is doing

STARTING POSITION: sidelying, elbow bent, arm tucked under the side line of your ribs (elbow at the soft part of the waist); other arm draped forward, hand grasping the triceps of your underside arm above your elbow

LEGS: knees bent, foot of the topside leg tucked behind the ankle of the underside leg

1. You inhale and expand the underside ribs into the elbow.

⇒ Feel your chest expand into the restricted space of your arms and shoulders.

Let the feeling of inhaling set in. Feel the uneven shape of the airspace in your chest - the topside shoulder and underside ribs. Feel where the muscular effort is. Take enough time.

2. You slowly exhale and sink onto your underside arm.

⇒ Allow your topside arm and shoulder to hang forward.

Allow your torso to relax and roll forward toward the surface. Relax your neck and let your head change position as it will.

Do 4-5 times.

3. Now, you inhale and hold your breath as you roll onto your back.

4. You relax and stretch luxuriously.

⇒ Feel the amount of breathing room you have on both sides of the chest.

Switch sides and repeat.

VERSION “B”

STARTING POSITION: underside arm tucked under the side line of your ribs (elbow at the soft part of the waist); other arm draped over your ear, topside leg relaxed straight in line with the torso, other leg bent, knee forward

1. You **inhale deliberately** and expand the underside ribs into your underside elbow.

Hold your breath until the feeling of inhaling sets in. Feel where your arm presses your ribs. Feel your diaphragm working against the pressure.

2. You slowly **exhale passively** and sink onto the underside arm.

⇒ You continue to **exhale actively** and reach with the topside arm to lengthen your top side.

Do 4-5 times.

3. Now, you inhale, hold your breath, and roll onto your back.

4. You relax and stretch luxuriously.

Breathe and compare both sides of your chest.

Switch sides and repeat.

VERSION “C”

STARTING POSITION: on your belly, one arm by your side, one arm under your ribs so your hand grasps the other arm behind the triceps, your face turned toward the shoulder of the “underside” arm

1. You inhale and deliberately expand your ribs (press) against your underside arm.

Hold your breath until the feeling of inhaling sets in. Feel where your arm presses your ribs. Feel your diaphragm working against it.

⇒ Continue to feel your rib pressure and lift your head slightly.

Feel what that does to the feeling of your ribs and diaphragm working.

2. You slowly exhale and sink onto the arm so it sinks into your chest.

⇒ If your head was lifted slowly lower it to rest.

Feel your ribs sink in. Relax your neck and let your head change position.

four (4) times or until satisfied

Turn your head to the other side and repeat steps (1.) and (2.) four (4) times or until satisfied.

3. You inhale one final time and, *while holding your breath*, roll over your **straight** arm onto your back.
4. Now, you exhale and explore your new freedom of breathing. Compare one side to the other.

Switch arms and repeat the entire process.

SPREADING THE RIBS

Now that you have freed the diaphragm and loosened your ribs, you are in a position to do something spectacular: to open and expand your entire rib cage. This will increase your breathing capacity and also make you look and feel younger and stronger.

You may have to buy new clothes after repeating this one a few times.

THE ESSENCE OF THIS MOVEMENT: Expanding your breathing capacity and freeing the movements of your ribs in breathing.

TIME TO COMPLETION: 10 minutes

NEW POSITION: lying on your belly

This maneuver may be easier to do without a shirt or top. No brassieres.

Roll slightly to the side to place the fingertips of one hand along the border of your ribs at the top of your abdomen. Gently curl those fingers into your abdomen at the edge of your ribs. You are going to press gently inward with them. Now, the other hand: Roll slightly to the other side and place your fingertips along the line of fingertips of your other hand. Now, the fingers of one hand can pull and those of the other hand can push against the same border of the ribs.

1. You apply enough pressure with the fingertips of both hands that you feel firm contact with the soft tissue at the border of your ribs.
2. Now, you exhale **deliberately**.
 - ⇒ Feel the pressure increase against your fingertips as your ribs move against them. That is the degree of pressure at which you will work.
 - Let the feeling of exhalation set in. Match the pressure with your fingertips.*
3. Now, you inhale.
 - ⇒ Maintain **the same pressure** against your fingertips by pulling with one hand and pushing with the other. Follow your ribs outward and help them move outward.

Let the feeling of inhalation set in. Match the pressure with your fingertips.

4. Now, you exhale.

⇒ Maintain **the same pressure** by relaxing your hands as you exhale.

5. You continue to inhale and exhale, following the narrowing and spreading of your ribs with your fingers.

By now, you will be noticing that your ribs are spreading a little further, each time.

⇒ “Walk” your fingertips to maintain contact with your rib border as it moves.

Continue until you are satisfied with the change.

NEW POSITION: Turn your head to other side and repeat.

NEW POSITION: Move your hands to the opposite side and opposite positions. Repeat the entire sequence

NEW POSITION: Turn your head to the opposite side and repeat.

Lift your head and chest to claim the freedom of your abdomen.

NEW POSITION: hands further toward your waist:

Repeat the entire sequence for both sides.

ADVANCED LOW BACK RELEASE

THE ESSENCE OF THIS MOVEMENT: Relaxation of the muscles of your low back and buttocks.

STARTING POSITION: on your back, knees up, feet planted three inches apart

1. With each hand, you grasp a knee below and in front of the knee joint.
2. You push your knees into your hands. To do so, SIMULTANEOUSLY:

- ♦ Contract your low back (lumbar spine muscles).

Tighten and relax this way until you can feel how tightening your back pushes your knees away.

- ♦ Push your knees away from your chest.

 - ⇒ Pull your heels toward your buttocks.

 - Tighten and relax until you can feel how doing this helps to push your knees away.*

 - ⇒ Make gentle “fists” with your feet.

 - ⇒ Inhale and shrug your shoulders.

 - Feel your neck bend backward, tighten in the back, and shorten as you shrug.*

3. You draw your knees toward your chest:

- ⇒ Relax your feet.

- ⇒ Relax the backs of your legs.

- ⇒ Relax your “leg push” and slowly draw your knees toward your chest.

- ⇒ Exhale gently as you look down your nose.

Continue to feel the tension between your arms and legs as you draw your legs up.

4. You continue to exhale as you draw your knees toward your chest.
⇒ Alternately tense and relax your low back muscles as you draw your legs closer and closer to your chest.

Move smoothly.

5. When your legs are near their limit, you lift your head slightly (1/4").
6. Now, you lower your head.

Reposition your hands onto the front of your legs above your knees.

7. Pull your legs toward your chest; push away with your hands.
⇒ Let your arms "win" until they are fully extended; then, lower your legs straight down, knees and ankles together.
8. Stretch out luxuriously with your arms above your head.

Repeat two or three times.

THE FLYING ACCORDIAN

People conditioned into Startle Reflex (tight chest and belly) can get some relief in this maneuver, or even from laughing at the title.

THE ESSENCE OF THIS MOVEMENT: the feeling of tightening the back and then the front of the body in an opening and closing movement

STARTING POSITION: on your back, knees up, feet down, fingertips touching the tops of your shoulders, elbows out

1. Inhale until full to the tops of the lungs.
 - Arch your back.
 - Spread your elbows wide.
 - Look up at your brow.
2. Exhale to bottom-empty.
 - Lift your head.
 - Curl forward.
 - Look down your nose.
 - Touch both your elbows to your navel (or as close as you can get easily or in a comfortable manner).

Do 5 - 10 times or until the feeling becomes familiar to you.

ROLLING AND UN-ROLLING YOUR SHOULDERS **(variation on maneuver by T. Hanna)**

THE ESSENCE OF THIS MOVEMENT: feeling how you can use shoulder movements to increase your breathing capacity

STARTING POSITION: lying on your back, knees up and together

1. Lay your arms out at shoulder level, palms up.
2. Do the following movements together as you exhale completely.
 - Roll your arms palm down. Turn as far as you can, comfortably.
Turn far enough that your shoulder moves and you feel the muscles near your spine stretching pleasurably.
 - Look down toward the tip of the nose (strongly!).
 - Lift your head.
3. Do the following movements together as you inhale completely.
 - Roll your arms palm up. Turn as far as you can, comfortably.
 - Look up toward the root of the nose (strongly!).
 - Lower your head, then tilt it back, chin up.

Repeat slowly 4 more times.

4. Inhale and hold your breath.
5. Compress the air by tightening your belly.
6. Very gradually, relax your belly, while compressing the air with your chest.
Feel how the air moves into the belly.

Do (Steps #4 - 6) two more times.

Variation on (6.):

Very gradually, relax your chest while contracting your belly.

⇒ Feel how the air moves from your belly into your chest. (4 times total)

VARIATION:

1. Lay your arms out at shoulder level, palms up.
2. Do the following movements together as you exhale completely.
 - Roll your arms palm down.
 - Look up toward the root of the nose between your eyes (strongly!).
 - Tilt your head back, chin up.
3. Do the following movements together as you inhale completely.
 - Roll your arms palm up.
 - Look down toward the tip of the nose (strongly!).
 - Lower your head, then tuck your chin toward your neck.

Repeat slowly 4 more times.

4. Inhale and hold your breath.
5. Compress the air by tightening your belly.
6. Very gradually, relax your belly, while compressing the air with your chest.

Feel how the air moves into the belly.

These movement sequences prepare you to do Thomas Hanna's breathing maneuvers, as shown in the Somatics book, (lesson 7).

OPENING THE “DARK VISE”

In his book, Somatics: Re-awakening the Mind’s Control of Movement, Flexibility, and Health, Thomas Hanna described a condition in which a person is habitually tight in the muscles of both the front and back of the body. This state of co-contraction puts the squeeze on a person from both the front and the back, as if they were in a vise; breathing is thus restricted and a person feels “under pressure”. In conditions of co-contraction, it is generally necessary to gain control of both parts of the contraction simultaneously, in order to contact the feeling as it is, and release it.

This maneuver accomplishes that result.

THE ESSENCE OF THIS MOVEMENT: **contacting the back and front of the body equally and releasing them simultaneously, freeing breathing in the process**

STARTING POSITION: **lying on your back, knees up, feet near your buttocks, legs balanced upright**

Compress:

1. Interlace your fingers and place your hands behind your neck.
2. Lay your elbows out flat on the floor.
3. Arch backward: SIMULTANEOUSLY:
 - Gently and gradually arch the small of your back off the floor.
 - Lift your feet slightly off the surface.

⇒ Pull your heels toward your buttocks by tightening the backs of your legs.

Do this a few times, tightening and relaxing, until you feel what it does to your ability to arch your back.

- Tip your head backward by tightening *the back of your neck*.
- Bring your elbows forward until they almost touch.

Move easily; do not force.

⇒ Point and push your elbows forward to make your chest concave.

Do this a few times, tightening and relaxing, until you feel the pull of your arms forward and the movement of your head backward opposing each other.

- Exhale.

*Feel your ribs flatten down as if being squashed from the front. You will probably feel a line of tension down **the sides** of your ribs.*

Feel your whole body shorten, head to feet.

Decompress:

4. SIMULTANEOUSLY:

- Begin to inhale.
- Bring your feet down.
- Flatten your back by relaxing all efforts in Step #3.

⇒ Push/slide your feet away from your buttocks to help you flatten your back.

- Relax the forward pull of your arms.
- Spread your arms wide and lay them onto the surface.

Let your chest begin to fill and deepen, front to back.

- Gently tuck your chin toward your throat.

Feel your whole body elongate.

Repeat four times more or until the feeling becomes familiar to you.

Someone in “dark vise” will probably get gradual degrees of release with each repetition. Continue to do this maneuver as long as you continue to improve.

IMPROVING ABDOMINAL BREATHING AND GETTING TALLER

THE ESSENCE OF THIS MOVEMENT: relaxing the inside of your abdomen, chest and neck so your torso lengthens and flattens

STARTING POSITION: lying on your back, knees up, feet near buttocks

VERSION "A"

1. Exhale all the way (down to the bottom).
2. Close your epiglottis (breathing passage "valve" -- the "coughing muscle").
3. Strongly attempt to breathe in, but prevent air from coming in.
4. Get the feeling of sucking your brain out of your head, through your neck and chest, into your belly, *above* the navel.
 - ⇒ Turn your head side-to-side.
 - ⇒ OPTION: Take a fresh, full breath, then exhale and continue . . .
5. Gradually, smoothly, and slowly relax the attempt to breathe in, while lengthening (flattening) your spine (still keeping air out).
 - ⇒ Rock your pelvis gently forward and back as you relax.
 - ⇒ Slide your elbows in-and-out (shoulders relaxed & resting on the floor, not moving).
6. When fully relaxed, take and release 1 or 2 breaths.

Repeat 2 times more.

* To locate the epiglottis, try an experiment. Cough and feel what stops the expulsion of air just before you cough. What you are feeling is the closing and then sudden opening of your air passage. Try closing it, again, and this time tighten your belly and feel the build-up of pressure in your chest, as if preventing yourself from exhaling. Now, keep it closed and create the feeling of a vacuum in your chest, as if preventing yourself from inhaling. That's what you need to do for this exploration.

VERSION “B”

1. Exhale all the way (down to the bottom).
2. Close your epiglottis (“coughing muscle”).
3. Strongly attempt to breathe in, but prevent air from coming in.

Get the feeling of sucking your brain out of your head, through your neck and chest, into your belly, *below* the navel. (You will end up sucking in your gut.)

⇒ Turn your head side-to-side.

4. Gradually, smoothly, and slowly relax the attempt to breathe in, while lengthening (flattening) your spine (still keeping air out).

⇒ Rock the pelvis gently forward and back as you relax the muscles.

⇒ Slide your elbows in-and-out (shoulders relaxed & resting on the floor, not moving).

5. When fully relaxed, take and release 1 or 2 full, deep breaths.

Repeat 2 times more.

VERSION “C”

1. Exhale all the way (down to the bottom).
2. Close your epiglottis (“coughing muscle”).
3. Strongly attempt to breathe in, but prevent air from coming in.
⇒ Suck in from *above* the navel.
4. Gradually, smoothly, and slowly relax the attempt to breathe in, as you curl forward (still keeping air out), lifting your head and shoulders.
You are switching the muscular effort from your diaphragm to your abdominal muscles.
5. Rock your pelvis forward and back (so you lift and lower your waistband), as you lie back by stages, a bit at a time with each rocking movement.
⇒ Feel a partial vacuum inside your chest.
6. When fully laid back, take and release 1 or 2 breaths.

Repeat four (4) times more.

VERSION “D”

1. Curl forward as you exhale all the way (down to the bottom).
2. Close your epiglottis (“coughing muscle”).
3. Strongly attempt to breathe in, but prevent air from coming in.
Suck in from above the navel.
4. Gradually, smoothly, and slowly relax the attempt to breathe in, as you relax down and lie flat (still keeping air out).
5. When fully relaxed, rock your pelvis forward and back, so you lift and lower your waistband.
⇒ Feel a partial vacuum inside your chest.
⇒ Relax the inside of your head.
6. Take and release 1 or 2 breaths.

Repeat four (4) times more.

VERSION “E”

NEXT POSITION: prone (on your belly), head turned

1. Exhale all the way (down to the bottom).
2. Close your epiglottis (“coughing muscle”).
3. Strongly attempt to breathe in, but prevent air from coming in. Suck in from *below* the navel.
4. Gradually, smoothly, and slowly relax the attempt to breathe in, as you actively curl yourself as if you were over a barrel (still keeping air out).
5. Relax very slowly, ‘till flat.
6. Take and release 1 or 2 breaths.
7. Lift your head and chest, then relax.
⇒ Feel how fully you breathe.
Can you feel your breath go up into your neck?

Repeat four (4) times more.

Turn your head the other way and repeat the sequence (5 times total).

Do your right and left sides feel the same?

VERSION “F”

NEXT POSITION: lying sideways on the tighter side, knees together at hip height

1. Exhale all the way (down to the bottom) and contract the ribs on the under side.
⇒ Push your head down into the surface.
2. Close your epiglottis (“coughing muscle”).
3. Strongly attempt to breath in, but *prevent air from coming in*.
⇒ Feel a partial vacuum in your chest.
4. Relax slowly down.

VARIATIONS: (3 times each)

a: Suck in from above the navel.

b: Suck in from below the navel.

5. Gradually, smoothly, and slowly relax the attempt to breathe in.
6. Stretch the under side (still keeping air out).
⇒ Lift your head.
⇒ Slowly reach long (above your head) with the arm of the contracted side.
7. Let your head down while relaxing the diaphragm (still keeping air out).
8. When fully relaxed, take and release 1 or 2 breaths.
9. Turn on your back and breathe.

Do the two sides of your brain feel the same or different?

Repeat four (4) more times, then switch sides.

VERSION “G”

POSITION: lying sideways on the tighter side, knees together at hip height

1. Exhale all the way (EMPTY).
2. Lift your head and contract the side muscles of the top side. Reach long with the bottom arm to contract your ribs.
3. Close your epiglottis (breathing passage “valve”).
4. Strongly attempt to breath in, but prevent air from coming in. (Keep your epiglottis closed.)

VARIATIONS:

- a: Suck in your gut above the navel. (3 times total)
- b: Suck in your gut below the navel. (3 times total)
5. Gradually, smoothly, and slowly relax the attempt to breathe in, while stretching the contracted side (still keeping air out).
 - ⇒ Lift your head.
Let your head down.
 - ⇒ Slowly reach your arm *over your head*, while relaxing the diaphragm.
 - ⇒ Reach long with the leg and arm (straighten) as you inhale.
6. When fully relaxed, take and release 1 or 2 breaths.
7. Repeat.

Switch sides and repeat the entire process.

VERSION “H” (good for sluggish bowel function)

STARTING POSITION: sitting on a horizontal surface (not a sloped chair), arms hanging

1. Exhale all the way (down to the bottom).
2. Close your epiglottis (breathing passage “valve”).
3. Strongly attempt to breathe in, but prevent air from coming in.

VARIATIONS:

⇒ Suck in from below the navel (3 times total)

Create the feeling of a vacuum in your belly. This move reaches into the pelvis.

⇒ Suck in from above the navel (3 times total)

Create the feeling of a vacuum in your chest. This move reaches into the head and neck.

4. Rock your pelvis forward and back until you need air. Start with a small movement.

⇒ As you roll, let your chest move so it adds to the movement.

⇒ Include the head and neck in the movement, forward and back

VARIATIONS:

⇒ Roll on your bottom in a clockwise circle.

⇒ Roll on your bottom in a counter-clockwise circle.

⇒ Include the head and neck in a circular motion.

5. Gradually, smoothly, and slowly relax the attempt to breathe in, while lengthening (flattening) your spine (still keeping air out).

⇒ Smoothly rock the pelvis gently forward and back as you relax, ending at the center.

6. When fully relaxed, take and release 1 or 2 breaths.

Do six (6) times, total.

VERSION "I"**NEXT POSITION: lying on your back or sitting erect with a straight spine**

1. Make yourself rigid, stiff as a board, from pelvis to head.
Notice how the muscles of the neck are also involved.
2. Get all the breathing muscles of your trunk to work as a unit:
 - Exhale.
 - Close the air passage.
 - Suck your belly in.
 - Exhale.
 - Get rigid. (Belly hard, back stiff)
 - Close the air passage.
 - Suck in.
 - Exhale and stiffen.
3. Still stiffening: Allow the belly to relax so shallow breathing is possible.
4. Gradually, smoothly, and slowly relax from that stiffness.
⇒ Relax by 1/6 with each inhalation; stiffen and exhale just a bit.
Notice how the neck also relaxes. Get tall/long as you relax.
5. Continue until fully relaxed, then repeat 2 more times.
6. Wiggle to loosen up.

BREATHING EXPANSION

THE ESSENCE OF THIS MOVEMENT: getting clear recognition of the impulse to inhale and expanding your breathing capacity beyond your usual maximum

VERSION “A”

STARTING POSITION: lying on your back, legs down

1. Take a full breath and hold it with an open air passage (as if still to breathe in).

2. Exhale very slightly and wait.

You will soon feel the impulse to breathe.

3. Take some air *without exhaling*.

4. Repeat (1) - (3) until you can expand no further.

Exhale and breathe easily.

Do three (3) times.

VERSION “B”

STARTING POSITION: lying on your back, knees up, feet near buttocks

1. Exhale, sounding the letter, “h” (“hhh”) to get the feel.

2. Inhale to the center of your body, breathing “hhh”.

3. Note the first moment you feel a restriction to breathing in.

4. Back off slightly, breathe gently against the restriction, and relax, keeping the air in.

⇒ Rock your pelvis forward and back.

5. When restriction lets go, expand further to the periphery.

Repeat (4.) & (5.) until you must exhale.

6. Breathe (“hhh”) through your mouth and nose for a few breaths.

Take another breath and repeat.

VERSION “C”

STARTING POSITION: on your back, one arm laid back by your head, the opposite leg bent, knee dropped out, foot against the inside of the opposite knee joint

1. Press your laid-back arm into the surface on which you are lying.
2. Inhale easily to capacity.
3. Feel and relax any restrictions to inhaling more fully.

Use the “Feathering” technique, Helpful Introductory Ideas, page 7. It may take 10 seconds or more before you recognize a restriction.

4. Inhale into the space made by relaxing restrictions.

Repeat Steps (1. - 4.) until you get no further expansion.

5. Press the side of your bent leg and your laid-back arm into the surface on which you are lying.

Use equal strength.

6. Inhale easily to capacity.
7. Feel and relax any restrictions to inhaling more fully.

Use the “Feathering” technique, page 11. It may take 10 seconds or more before you recognize a restriction.

8. Inhale into the space made by relaxing restrictions.

Repeat Steps (5. - 8.) until you get no further expansion.

NOTES

NOTES

FREEING & COORDINATING YOUR SPINE

A WORD ON THE SPINAL CURVES

introductory ideas

A word on the “natural spinal curve” of the spine. There is no way to say how much is “natural”. What there is, is “natural **curvability**”. The spine curves in response to movement and position. This is not to say that the “home” alignment of the spine is straight, but that how much curve the spine has is determined by the individual’s bone structure and, in large part, by the amount of tension present in the musculature **at the moment**. In light of this obvious understanding, the statement that a spine has, or has lost, its natural curve(s) is, at best, questionable.

Moreover, the depth and position of the spinal curves has everything to do with the size of the individual and individual body type. (Consider this statement in relation to one-size-fits-all “lumbar support” cushions and furniture.)

Problems arise when the muscles of the spine are so habitually tight that they **exaggerate** the lumbar curve, or those of the neck are so tight that they prevent free mobility and induce compression of the neck vertebrae. Such **habitual** tightness can lead to pain and to disk breakdown.

The most one can say about spinal curves is that they change in relation to position. In sitting, the optimal curves consistent with balance form when sitting on ones “sitbones” -- the bones you feel deep to the creases (“smiles”) of the buttocks -- when sitting on a level surface. To find the position, rock backward and forward by arching and flattening the spine until you find the position of greatest spinal support with **the least muscular effort**. Taper off the rocking until you come to rest at the central position of greatest support. At that point, you will feel the natural impulse of the spine to lengthen and the chest to become more rounded and full.

The somatic learning exercises of this section enable you to cease holding yourself tight, to relax and allow the spine to have its natural curvability, so that the position described above is comfortable for you.

Stretching vs. Coordination

introductory ideas

Stretching operates on the premise that movement problems originate with one or more tight muscles. The idea is to get freedom of movement and to restore comfort by forcing muscles to lengthen.

Muscles are related to each other by one overriding function: balance -- as in moving with grace instead of with clumsy awkwardness, shakiness, stiffness, or weakness! -- and muscles are related to each other not merely through tissue connections, but also through the brain's coordination function.

The body balances as a whole. Any muscular activity affects balance. The activities of the muscular system as a whole are what is meant by the word, coordination.

Coordination adjusts muscular tensions throughout the body to maintain balance in the midst of the application of adequate strength in motion.

Balance and coordination are acquired by learning and maintained by familiarity. Think of any action you have learned, like riding a bicycle or even walking. Learning it was a whole-body action of putting movements together.

Therefore, any change of muscular tension by stretching - - without also instilling a satisfactory, replacement-pattern of coordination, disrupts balance and coordination throughout the body.

With that disruption, two responses are possible:

- Change the coordination of the rest of the muscular system to accommodate the stretched muscle, for the sake of balance.
- Re-contract the stretched muscle to fit the familiar balance pattern of the body's coordination.

One of these two alternatives, or perhaps some of each, must occur to maintain balance.

The question is, How much of each response occurs in any given individual?

Response #1 requires a nearly instantaneous relearning of muscular control throughout the body. This is much easier when the rest of the musculature is responsive to change and a person's sensory awareness level is high -- and impossible when a person is set in their ways.

Response #2 involves returning to a familiar, if uncomfortable status, for the sake of familiar balance.

Is it not evident that Response #2 is the more likely response, in many cases?

So, the whole practice of isolating and stretching muscles runs counter, in many individuals, to the one overriding imperative of movement: balance.

This fact is one reason why muscle lengthening during stretching occurs so slowly and is so arduous, and why its effects are so often temporary.

Any activity intended to alleviate muscular tension, to be successful, must take into account these two related functions: balance and coordination. Then, the approach is not one of isolation, but integration, and not stretching, but developing better coordination and control.

WAVING THE SPINE (T. Hanna)

THE ESSENCE OF THIS MOVEMENT: feeling the ability of the spine to curve throughout its entire length

STARTING POSITION: sitting cross-legged

1. Lean your head backward and forward slowly enough to feel every millimeter of movement.
2. Inhale and arch your back so you curve backwards.
3. Exhale and lean forward.

Do 5 times.

NEXT POSITION: prone, hands under shoulders (cobra pose for those who know yoga)

1. Raise your head and inhale.
2. Lower your head and exhale.

Do 5 times.

NEXT POSITION: prone resting on elbows (cobra pose)

1. Inhale as you raise your head and look up at your brow.
2. Exhale as you lower yourself and look at your navel.

Do 5 times.

NEXT POSITION: on your back, propped up on elbows

1. Inhale, lean your head back and raise your belly.
2. Exhale, bow your head forward, and flatten your belly.

Do 5 times.

NEXT POSITION: cross-legged, leaning back on hands, elbows straight

1. Inhale, lean your head back and raise your belly.
2. Exhale, raise your head, and flatten your belly.

Do 5 times.

**NEXT POSITION: all fours (shoulder and hip joints flexed to 90 degrees)
(cat stretch)**

1. Inhale as you raise your head and look up at your brow.
2. Exhale as you lower your head.

Do (1. and 2.) 5 times

3. Inhale as you raise your head, look up at your brow, curve your spine, and push your belly outward.
4. Exhale, lower your head, and arch your spine up, as a cat does.

Do 5 times.

NEXT POSITION: kneeling

1. Inhale, lean your head back and raise your belly.
2. Exhale, bow your head forward, and flatten your belly.

Do 5 times.

SITTING ARCH & CURL

THE ESSENCE OF THIS MOVEMENT: to free the ability of the spine to curve from any restriction from the shoulders

STARTING POSITION: sitting on your heels

1. Shrug strongly. Hold the shrug.
2. Roll your pelvis forward and backward. Sit tall; do not lean forward or backward.
3. Contract your back and shrug your shoulders up *and back*.
4. Relax your back and let your sternum and ribs drop.
5. Shrug your shoulders up *and forward*.

Repeat (3.) - (5.) for 1 minute or so.

LENGTHENING BY CURLING YOUR SPINE

THE ESSENCE OF THIS MOVEMENT: using a rolling movement of the head on the floor to assist in relaxation of the spinal muscles and lengthening of the spine

STARTING POSITION: on knees and elbows, with your head against the carpet, your fingers interlaced behind your head

VERSION “A”

1. Exhale and push forward so your head rolls under.

Use your hands to brace your head so you do not slide.

2. Inhale, back off, and tighten your low back.

Relax your belly and inhale.

3. Relax your low back and exhale.

4. Walk your knees closer to your elbows and repeat.

Repeat slowly for 1 minute or so.

VERSION “B”

1. Exhale and push forward so your head curls down and under.

Use your hands to brace your head so you do not slide.

2. Inhale, back off, and arch your low back (belly concave).

Breathe into your belly. Keep your breath.

3. Relax your belly and inhale.

4. Exhale and slide your elbows toward your knees.

Do for 1 minute or so.

NEXT POSITION: on all fours (Fatima Alcantara, C.H.S.E. and L. Gold)

1. Sit down on your heels, face down, arms extended forward.

You are now in a kind of "bowing" position.

2. Look up with your eyes and begin raising your head and chest.
3. Rise up off your heels, a bit (rock forward).
4. (Sink backward:) Look down your nose and begin lowering your head and chest, so your belly goes concave
5. (Shift forward:) Rise up off your heels, a bit further.

⇒ Look up at your brow and begin raising your head and chest, so you arch backward (head up).

⇒ Rise up off your heels, a bit further.

Repeat, each time rising off your heels a little further, until you are extended fully forward on all fours.

6. Now, go in reverse:

(Sink backward:) Look down your nose and begin lowering your head and chest, so your belly goes concave.

Rock back ("sit") toward your heels, a bit.

7. (Shift forward:) Look up at your brow and begin raising your head and chest, so you arch your back.
8. (Sink backward:) Look down your nose and lower your head and chest, so your belly goes concave.

⇒ Sink toward your heels a bit further each time.

Repeat (6.) through (8.) until you are sitting on your heels, again.

9. Resting on your elbows with your hands interlaced, place your head in the hollow of your hands. Rock forward and back on your scalp.
10. Lie on your back and rest.

FINE CONTROL OF YOUR LUMBAR SPINE (T. Hanna)

This exploration gives better control of the muscles that arch your back, particularly those of the lumbar spine, between the ribs and the waistband.

The bones of that part of your spine are numbered, from top, down. There are five of them. “L1” means “lumbar vertebra #1,” which is the topmost lumbar vertebra just below your lowest ribs. L2 is just below L1, and so on. If you use your hand to trace the bony ridge of the pelvis from your waist toward the center, you will arrive at L5, which you can feel as a bony bump at the center of your back. L4 is just above.

In the following exploration, devised by Dr. Hanna, you will touch each of those bumps (the “vertebral laminae”) to the surface upon which you are lying.

You will get the best results from this exploration if first you have done Lesson 1 from Dr. Hanna’s book, Somatics and learned to relax your low back muscles.

DISTRIBUTING THE TENSION BETWEEN THE SMALL OF YOUR BACK AND THE BACKS OF YOUR LEGS

THE ESSENCE OF THIS MOVEMENT: fine control of the muscles that create the curve of the small of the back, vertebra by vertebra

STARTING POSITION: lying on your back, knees up & together, feet near your buttocks, fingers interlaced behind your *neck*

1. Arch your back by tightening the muscles at the “small” your back, turning your tailbone *down* against the floor.

This action lifts your belly and chest, creating space between your back and the floor.

⇒ Shrug your shoulders so you feel your neck tighten.

2. While maintaining the tension at the small of your back, lift your hips by pressing down with your feet.

*Go only as high as you can **while maintaining the feeling of tension in your back muscles.***

3. Gradually lower yourself, vertebrae by vertebrae until you are completely rested on the surface.
4. Relax completely and take two full, deep breaths.

Repeat until you are satisfied you have gotten what changes you can get, for now.

VARIATION “A” (T. Hanna)

1. Lift your hips by pressing down with your feet.
2. Gradually lower yourself, vertebrae by vertebrae until L1 touches the surface.
3. Lift again.
4. Now, touch L1 and L2.
5. Lift again, then continue, as follows.
 - L1,2,3 (then lift)
 - L1,2,3,4 (then lift)
 - L1,2,3,4,5 (then lift)
 - L2,3,4,5 (then lift)
 - L3,4,5 (then lift)
 - L4,5 (then lift)
 - L5 (then lift)
6. Relax completely and take two full, deep breaths.

VARIATION “B” (T. Hanna)

1. Gradually lift yourself until L5 lifts off the surface.
2. Gently lower yourself
3. Now, lift L5 and L4.
4. Gently lower yourself, then continue, as follows.
 - L5,4,3 (then lower)
 - L5,4,3,2 (then lower)
 - L5,4,3,2,1 (then lower)
 - L4,3,2,1 (then lower)
 - L3,2,1 (then lower)
 - L2,1 (then lower)
 - L1 (then lower)
5. Relax completely and take two full, deep breaths.

Repeat the basic form of this movement (page 66).

THE SWIMMING DOLPHIN

THE ESSENCE OF THIS MOVEMENT: ability to move the upper and lower halves of the spine independently

STARTING POSITION: prone, hands beneath your forehead, palms down, on top of each other

VERSION “A”

1. Inhale and lift your head.
2. Continue to inhale and lift your fanny.
Feel your belly stretch.
3. Exhale and lower your head; press down onto your hands.
4. Continue to exhale and lower your fanny; press your pubic bone down.
Feel your belly contract.

Do 5 times total.

VERSION “B”

1. Inhale and lift your fanny.
2. Continue to inhale and lift your head.
Feel your belly stretch.
3. Exhale and lower your fanny; press your pubic bone down.
4. Continue to exhale and lower your head; press down onto your hands.
Feel your belly contract.

Do 5 times, total.

ADVANCED UPPER BACK RELEASE

THE ESSENCE OF THIS MOVEMENT: lengthening of the spine, using the arms and shoulders, in a way that feels like a very satisfying stretch

VERSION "A"

STARTING POSITION: standing, fingers interlaced behind your head, feet parallel, three inches apart

1. Contract the back of your body. To do so, simultaneously:

- Bring your elbows together and pull forward.
- Resist with your head, neck, and upper back.

Lock your knees and push your pelvis forward. Tighten your buttocks.

- Inhale and look up all the way at your brow.

Tip your head back.

⇒ You may feel how each eye is an extension of ½ of the brain.

2. Begin to curl forward: (SIMULTANEOUSLY:)

- Begin to exhale gently as you look down with your eyes.
- Begin to bend your knees, keeping your feet flat on the ground.
- Begin to bow forward, curving your back.

3. Continue to exhale as you bring your elbows toward your knees. Go until you would have to stretch to go further.

You want both elbows to touch your knees simultaneously. Repeat (1) - (3) until you can do so or you cease to gain flexibility.

4. When your elbows reach your knees, move into a squatting position. Stop when you feel your heels lift.

5. Slowly inhale as you straighten back up, keeping both feet flat and legs balanced.

Repeat until you cease to gain flexibility.

VERSION “B”

STARTING POSITION: standing, fingers interlaced behind your head, feet parallel, three inches apart

VARIATIONS:

A) As you curl, look slightly left and right. (4 times)

Feel how that affects your upper back and shoulders.

⇒ When your elbows reach your knees, spread your elbows to go outside your knees.

B) Instead of curling (Step #2., Version “A”), keep your spine straight and bend at your hip joints.

Feel the backs of your legs lengthening.

Let go of your . . .

- eyes
- brain
- tongue
- jaw
- heart

GAINING MORE FREEDOM OF THIGH MOVEMENT **(preparatory maneuver)**

The following movement exploration improves your ability to spread your knees. It is especially valuable to dancers and athletes.

STARTING POSITION: on all fours (hands and knees), knees slightly spread.

ESSENCE OF THE MOVEMENT: slowly swaying to one side so you feel your abdominal and inner thigh muscles *contact*, then relaxing so you feel them relax

1. Put your weight on one knee.
2. Slowly move the other knee about one inch (1") to the opposite side.

Control the speed with your abdominal muscles (preventing yourself from falling to the side).

3. Bring the other knee down and *relax*.

Feel yourself sag. You may feel a stretch in your inner thigh.

Repeat (1.) - (3.) until you have spread your legs as wide as you comfortably can.

Then, reverse direction until you are at the starting point.

4. Move both knees back, a bit (away from your chest).
5. Repeat the movements.

Continue to do the movements and to shift positions until you have gone as far as you can.

Then, reverse direction, drawing your knees progressively toward your chest with each set of repetitions.

Turn onto your back and rest.

Switch legs and repeat the entire process.

ENDING TAILBONE PAIN THROUGH MOVEMENT

Contracting Your Buttocks by Spreading Your Legs

STARTING POSITION: lying on your belly, hands stacked on top of each other under your forehead, palms down, legs spread to the extreme, knees bent, soles of your feet touching snugly

Note: To do this set of maneuvers, the muscles of your inner thighs (the adductors) must be free enough for you to be comfortable in the described position. If they are not, go to the preparatory exercise on page 72.

ESSENCE OF THE MOVEMENT: keeping your knees spread and arching your spine backward so you feel the contraction between your buttocks

1. Tighten the backs of your legs to bend your knees tightly.
⇒ Contract the soles of your feet.
2. Lift your knees off the ground.
3. Lift your head, hands, and elbows as a unit.
⇒ Tip your head strongly back to help tighten your low back.
You are now arched backward with your belly pressing into the ground.
4. Sidebend to the more painful side to locate the position that makes it easiest to feel the painful area. Decrease your effort, to make it tolerable.
⇒ Lift one elbow, then the other, to find which way you feel stronger. Work in that position.
⇒ VARIATION: Lift the other elbow and locate the position that makes it easiest to feel the painful area.
5. Relax slowly, yet directly, down to the ground.

Repeat (1.) - (5.) approximately five times or until you can do the movement with assurance.

NEXT STEP:***Contracting Your Buttocks by Thrusting Your Pelvis Forward and Up***

STARTING POSITION: sitting with legs crossed (“Indian style”), leaning back on your hands (propped up on your hands)

ESSENCE OF THE MOVEMENT: lifting yourself onto your knees and hands (which are behind you)

1. Contract your pubo-coccygeus (“P-C”) muscle and hold it tense.

This muscle runs from behind your pubic bone, under the floor of your pelvis, to your tailbone. You can feel it contract when you tighten your sphincters (stop the flow of urine, mid-stream.)

2. By arching your back, thrust your pelvis up and forward.

The only parts of you now in contact with the ground are your knees and hands.

⇒ Look over one shoulder to help get more lift.

3. Gradually relax down into a sitting position, contracting and relaxing your P-C muscle several times, slowly and smoothly along the way.

4. Slowly straighten your legs and lean forward.

5. **(For the review phase, only. Do not do this movement the first time.)**

Reach forward, turning the backs of your hands toward each other.

This causes your shoulders and tailbone area to spread.

Repeat (1.) - (4.) with your legs crossed the opposite way.

NEXT STEP:

Same as above, but with a different STARTING POSITION: sitting with the soles of your feet touching (legs spread, knees bent), leaning back on your hands (propped up on your hands)

NEXT STEP:

Stand up and walk to get a feel for how your legs move.

NEXT STEP:

Partially Squatting from a Standing Position, then Standing Up Again

STARTING POSITION: standing, feet no wider than your shoulders, arms hanging freely at your sides

ESSENCE OF THE MOVEMENT: breathing with full, relaxed ribs as you bend your knees with the weight just in front of your heels

1. Slowly move as if to sit down where you are.

*Make sure your arms stay relaxed. Come down only as far as you can **with your feet flat on the ground.***

⇒ Get the feeling that your hips are moving back as much as your knees are moving forward.

2. Take two full, easy breaths.
3. Begin to straighten to a standing position.

Move very slowly, using breaths to reveal and relax tensions in your ribs.

4. Relax in a standing position.

Repeat until you get some improvement in your balance and smoothness of movement.

NEXT STEP:

Stand up and walk to get a feel for how your legs move.

NEXT STEP:

Repeat Contracting Your Buttocks by Thrusting Your Pelvis Forward and Up. This is the “Review Phase” at Step 5.

NEXT STEP :

Repeat Partially Squatting from a Standing Position, then Standing Up Again

NEXT STEP:***Drawing Your Knees Toward Your Chest***

STARTING POSITION: lying on your back, holding your knees with your hands, ankles together

ESSENCE OF THE MOVEMENT: drawing your knees slowly toward your chest as you tap your heels together

1. Holding the *front* of your knees securely with each hand, push your knees away from your chest.

Allow your shoulders to stretch

⇒ Inhale and arch your back as you push your knees.

⇒ Push your head down against the floor.

⇒ Tighten the backs of your legs.

Notice how that helps you push your knees against your hands.

2. Very slowly exhale and relax the push. Take up the slack by drawing your knees toward your chest.

⇒ Keep your knees together.

Feel your sacrum (the bone between your buttocks) roll against the floor from your tailbone toward your waist.

3. Repeat Step (1.).

4. As you repeat Step (2.) (drawing your knees toward your chest) tap your heels against each other repeatedly.

Feel the area at your waistline relax and stretch open.

Repeat until you feel you have gained some mobility.

NEXT STEP:

Balancing the Hips through Cultivating Symmetrical Leg Movement

These movements come from the discipline of Rolfing Movement[®], developed by Judith Aston and Ida P. Rolf, Ph.D., the developer of the Dr. Ida P. Rolf method of Structural Integration.

STARTING POSITION: sitting with your legs outstretched in front of you, so you look like the letter, “L”; the feet touching snugly along the inner line, heel-to-toe

NOTE: If your hamstrings are too tight to permit this position, do the movements to free the hamstrings in the module for the lower extremities.

ESSENCE OF THE MOVEMENT: doing the movement in such a way as to create the same sensations in the right and left legs and hips: symmetry.

Three foot positions are involved:

- *feet pointed, toes pointed*
- *feet pointed, toes up*
- *feet up, toes up (gently -- minimal stretch)*

Rehearse these three positions until they make sense to you.

1. FEET POINTED, TOES POINTED: Slowly turn your knees outwardly.

As you do, feel the musculature of your hips doing the turning movement. Intend that they feel symmetrical: right=left, the sensations mirror each other

2. Slowly turn your feet back to center.

Feel your ankles as you do the turning movement.

⇒ Intend that the sensations of your feet feel symmetrical: right=left, the sensations mirror each other

⇒ Relax your legs, so that you feel as if your knee and ankle joints are hollow.

3. FEET POINTED, TOES UP: Slowly turn your knees outwardly.

4. Slowly turn your feet back to center until the feet touch, snugly.

Feel your ankles as you do the turning movement. Intend that the sensations of your feet feel symmetrical: right=left, the sensations mirror each other.

5. FEET UP, TOES UP: Slowly turn your knees outwardly.

6. Slowly turn your feet back to center until the feet touch, snugly.

Feel your ankles as you do the turning movement. Intend that the sensations of your feet feel symmetrical: right=left, the sensations mirror each other.

⇒ Intend that the sensations of your feet feel symmetrical: right=left, the sensations mirror each other

⇒ Relax your legs, so that you feel as if your knee and ankle joints are hollow.

7. FEET POINTED, TOES UP: Slowly turn your knees outwardly.

8. Slowly turn your feet back to center until the feet touch, snugly.

Feel your ankles as you do the turning movement. Intend that the sensations of your feet feel symmetrical: right=left, the sensations mirror each other.

9. FEET POINTED, TOES POINTED: Slowly turn your knees outwardly.

As you do, feel the musculature of your hips doing the turning movement. Intend that they feel symmetrical: right=left, the sensations mirror each other.

10. Slowly turn your feet back to center.

Feel your ankles as you do the turning movement. Intend that the sensations of your feet feel symmetrical: right=left, the sensations mirror each other.

⇒ Intend that the sensations of your feet feel symmetrical: right=left, the sensations mirror each other.

⇒ Relax your legs, so that you feel as if your knee and ankle joints are hollow.

11. Draw one leg up about two inches (2"), dragging the heel.

12. Draw the other leg up the same way.

Repeat these movements until you have drawn your legs up as high as you can.

13. FEET UP, TOES UP, ANKLES AND KNEES PRESSED TOGETHER: Push your legs into a straight-forward position.

14. When your legs are straight, rub your ankles together with a swivelling, back-and-forth motion of the hips.

Stand, again, and walk.

FREEING THE MUSCLES OF THE NECK

The simplest and most basic movements of the neck are involve moving the head forward and backward, when standing or sitting, and lifting the head, when lying down. These are the movements with which we begin to improve movement and comfort of the neck.

After that, we will deal with the muscles involved in turning the head left and right.

BOWING

THE ESSENCE OF THIS MOVEMENT: arching your neck and head back, using the neck muscles, and then allowing them to curve forward, by relaxing

STARTING POSITION: sitting erect

VERSION “A”

1. Interlace your fingers behind your head.
2. Pull forward and down with your arms and straighten against the pull (prevent movement) with your neck muscles.
3. Relax slightly and allow yourself to sag (about ½ inch).
Let your chest sink.
4. Again, pull down with your arms and straighten against the pull (no movement) by resisting with your neck muscles.
5. Relax slightly and allow yourself to sag (about ½ inch).
6. Repeat until you are as curved as you can get.
7. Straighten with no resistance, and take two full, deep breaths.

VERSION “B”

1. Interlace your fingers behind your head.
2. Slouch all the way down.
3. Pull down with your arms.
4. Raise/straighten against the pull (no movement).
5. Relax in place.
6. Straighten (1/2 inch) with no resistance.
7. Repeat steps (3.) - (6.) until you are fully erect, again.
8. Relax and take two full, deep breaths.

THE FLEXIBLE SEESAW

This sequence relieves muscular tension that interferes with your ability to turn your head left and right. To some extent, it also relaxes the muscles that pull your head down and forward, enabling you to come more comfortably to a more erect posture.

THE ESSENCE OF THIS MOVEMENT: controlling the muscles of the front and sides of your throat and neck

STARTING POSITION: on your back, knees up & together, feet near your buttocks, hands near your ears, arms lying flat, elbows out

VERSION "A"

1. By pressing down with your feet, lift your hips high.
⇒ Exhale as you do so.
2. Slightly lift your head so the weight comes off your scalp. Keep your chin tucked near your neck.
3. Keep your head up and let your hips come down.
4. Let your head sink down.
⇒ Inhale as you do so.

Repeat twice (3 times total).

SUMMARY:

- ◇ hips up
- ◇ head up
- ◇ hips down
- ◇ head down

VERSION "B"

1. Turn your head slightly to the left (about 1/2 inch).
2. By pressing down with your feet, lift your hips high.
⇒ Exhale as you do so.
3. Slightly lift your head so the weight comes off your scalp. Keep your head turned as you lift.
Feel the air space behind your nose.
4. Keep your head up and let your hips come down.
⇒ Inhale as you do so.
5. Slowly ... let your head down.
Continue to feel the air space behind your nose.
6. Take two full, deep breaths, and relax.

Repeat, same position.

7. Turn your head slightly further and repeat steps (2.) - (6.) two (2) times, total, in each position.
8. Repeat until your head is turned all the way to the left.
9. Now, do the entire sequence, turning your head to the right, by stages of repetitions.
10. When you reach center, do two repetitions.

Continue the entire sequence to the far right and back to center.

FREEING A TIGHT NECK/SHOULDER AREA

STARTING POSITION: on your belly, face turned to one side, hand of the side you are facing under your cheek so your wrist is just in front of your lips, palm down; other arm by your side

THE ESSENCE OF THE MOVEMENT: feeling the muscular contraction where your shoulder meets your neck and keeping your shoulder and neck snugly together as you move

1. Leaving your hand down, slowly lift your elbow as high as you can. Your wrist bends backwards.

Feel your shoulder move toward your neck. At first, the sensation may be vague. Stay lifted until you feel which muscles tire.

2. Feel gravity as you lower your elbow as slowly as you can.

Imagine having broad shoulders, as you lower your arm.

Notice the last place that relaxes.

Repeat this action slowly until you feel where the movement comes from and your movement gets smoother.

3. Lift your head so that you move your neck toward the muscles you felt get tired.

⇒ As you lift, bend backward at your wrist so the back of your hand stays against your cheek.

Notice how that increases the sensation in your neck and shoulder.

4. Feel gravity as you lower your head.

Come to complete relaxation.

Repeat until you can contract the neck/shoulder area strongly, at will.

5. Lift your elbow, as before, and hold the position.

6. Lift your head as before, and hold the position.

*Feel both actions at the **same place** in the neck/shoulder area.*

⇒ Lift the leg of the side opposite to your lifted elbow.

You feel how to do so helps to lift your leg and elbow.

7. Keeping your neck/shoulder area tight, roll sideways toward your lifted elbow until your elbow is down on the surface.

You head, neck and shoulder move as a unit, snugly.

⇒ If your leg is lifted, lower it at the same time as you lower onto your elbow.

8. Slowly relax your neck until your head is down.

9. Relax completely.

SUMMARY:

1. **elbow up**
2. **head up**
3. **elbow down**
4. **head down**

Repeat until you feel yourself sink deeper into the surface on which you are lying.

NEW STARTING POSITION: on your belly, face turned to one side, hand of the side you are facing under your cheek so your wrist is just in front of your lips, palm down, other hand under the side of your head above your ear.

1. Lift your head, as before, and hold the position.

Feel where you tighten.

2. Lift your elbow, as before, and hold the position.

Feel both actions at the same place in the neck/shoulder area.

3. Keeping your neck/shoulder area tight, lower your head down to the surface.

You are relaxing down onto your ear, controlling the movement by pressing down on your opposite hand and forearm.

⇒ Feel the opposite shoulder push into the nape of your neck as you lower yourself.

4. Slowly relax your arm and shoulder until your elbow is down.

Imagine broad shoulders as you lower; allow your shoulder to spread away from your neck.

SUMMARY:

1. **head up**
2. **elbow up**
3. **head down**
4. **elbow down**

Repeat until you feel a satisfactory change.

Turn onto your back and feel the difference in your two shoulders.

Now, turn your head the other way and repeat for the other side.

SUGGESTION:

The next time you do this sequence, begin with the other arm and shoulder.

FREEING YOUR NECK, SHOULDERS, AND UPPER BACK

STARTING POSITION: lying on your belly, face turned to one side, hands under your face, one wrist under your ear (i.e., face turned left, right wrist under ear), the leg of the side you're facing turned, knee out and bent.

1. Lift the elbow on the side whose wrist is under your ear.

Get the shoulder to tuck up toward the base of your head. There's a concavity at the base of your skull (nape of the neck) into which your shoulder fits neatly, when shrugged.

2. Tip your head back to meet your shoulder.

3. Lift your head, hand, and shoulder as a unit.

⇒ Push down on the other forearm to help lift you.

⇒ When lifted, turn your head either direction until you can feel the tight and painful muscle working; pull your shoulder toward it.

4. Relax straight down without turning; rest onto your chin and melt.

Repeat this until you can feel the head and should fit together and you can feel where the lifting movement comes from.

5. Bring your attention to the leg of the side you're facing.

6. Lift that leg as you lift your arm and head.

Notice how much easier it is to lift your head and shoulder when you lift your leg.

⇒ Press the opposite knee into the surface with force equal to that of the opposite, stretched-out arm.

7. Lower yourself slowly.

Repeat until the sore area feels ok. Then lift and turn your head to find another sore spot, if there is one, and repeat the process.

Reverse your position and work on the other side of your neck and shoulder.

SIDEBENDING: THE BANANA-SHAPED CURVATURE

THE ESSENCE OF THIS MOVEMENT: gaining control over the muscles of the sides of your neck and torso by using movement to reveal habitual tension

STARTING POSITION: sitting straight, turn your head slightly to one side.

1. If facing left, place your left hand over the top of your head, fingers over the ear.
2. Begin nodding your head, as if to say, “Yes.”
Do a large movement and notice at which position, if any, you have pain.
3. Slowly allow your hand to draw your head toward your shoulder.
Let the other shoulder come up toward your neck as your head goes over.
⇒ As your head approaches your shoulder, pull the hip below that shoulder toward the armpit of that shoulder.
4. When you feel a minimal stretch, stay in place and inhale fully.
⇒ Do the “feathering technique”.
5. Exhale and resume the slow release.
⇒ Do a very slow, very small nodding movement at the previously painful position.
6. Go as far as you comfortably can (gently).
7. Bring your head upright, again.

Switch sides and repeat.

ERASING PAIN IN THE SIDES OF YOUR NECK (deeper)

This sequence relieves muscular tension and erases pain that interferes with your ability to tilt your head, ear-to-shoulder. To some extent, it also softens the rib cage, for freer breathing.

THE ESSENCE OF THIS MOVEMENT: combining multiple position-adjustments to target exactly the same painful spot in the neck. Always work within your tolerance for the sensations generated (always short of cringing).

STARTING POSITION: sidelying, underside leg straight, topside leg bent at the knee

1. Lift your head enough to feel some tension in your neck.
2. **Locate a painful position:** Move your head forward and backward (bow your chin forward toward your chest, move it backward away from your chest). Stop at the painful spot you want to clear up.
3. *In that position:* Turn your head left and right to locate the best position in which to feel the spot.
4. *In that position:* Roll forward and back on the side of your ribs to locate the best position in which to feel the spot.
This positioning makes optimal use of gravity.
5. **Notice the place where your ribs press the surface.**
6. Press that place down by exposing your ribs to the surface.
Your head will lift, slightly.
7. *In that position:* Pull the waist on the topside toward the spot as you stretch the underside leg.
⇒ Shrug your topside shoulder toward the spot.
8. Take a deep breath.

9. Exhale and sink **straight down onto the place where your ribs touch the surface.**

Keep your balance all the way down.

⇒ If you have used your shoulder, keep pulling it toward the painful spot, all the way down.

Repeat, testing the same spot. If something remains, repeat; otherwise, locate another spot.

When you have exhausted all the painful areas on one side, when they cease to improve, or when you are just plain exhausted (!), turn onto your other side and repeat the process.

RELAXING THE FRONT OF YOUR NECK

THE ESSENCE OF THIS MOVEMENT: using gravity and the weight of your head to learn control of the front muscles of your throat and neck in a slow, comfortable manner

STARTING POSITION: lying on your back, with your head and neck overhanging the edge of a bed or massage table upon which you are lying, with the edge of that surface at your *shoulders*

1. Exhale and raise your head.
⇒ Lead with your jaw (“chin up”).
2. Raise your arms, and with your hands, clasp your forearms.
3. Rest your wrists on your forehead.
4. Gradually and slowly lower your head while inhaling. Look at your brow, as you do so.

VARIATIONS

- a) Do steps (1.) - (4.) while gently looking left and right.
- b) Do steps (1.) - (4.) while gently looking nodding as if to say, “Yes.”

MOVEMENTS OF THE UPPER SPINE AND RIBS

Once you have relaxed the muscles of your neck, you can lengthen the muscles of your upper back, the part of your spine directly below your neck.

Once you have done that movement, the sequences that follow develop freedom and control of the muscles involved in looking over your shoulder.

The arm movements from Somatics, Lesson 4, also beautifully assist this lengthening and further aids in gaining control of the muscles of your neck.

THE ESSENCE OF THIS MOVEMENT: feeling your ribs and spine

STARTING POSITION: on your belly, hands on the ground by your shoulders

1. Look up and to one side with your eyes.
2. Inhale.
3. Follow (lifting) with your head, neck, and shoulders, pushing down with your hands.

Keep lifting until only your belly touches the ground.

Feel the extensors of your spine and ribs contract.

⇒ Notice any sore places in your back.

4. Begin to exhale and slowly lower yourself.
5. Take a slow, deep breath and relax.
6. If you notice any soreness in your back, find the place where it connects to your ribs in front.
7. Gently push that place into the surface on which you are lying.
8. Slowly relax all the way.

Do four (4) times total.

Do the entire sequence looking to your other side.

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THE JAWS

Problems related to TMJ (jaw joint) Syndrome, such as pain, bruxism (grinding), and, often, tinnitus (ringing of the ears) hinge around tight muscles of biting. In general, TMJ problems are about chronic clenching. They may arise from repressed emotion, repressed speech, or from jaw trauma (including dental work).

There is a peculiarity about the jaws: nobody wants to let go of control!

This is understandable: the mouth has to do with some very important functions: eating, speaking, kissing, and last but not least, biting, the most primal aggressive (and defensive) act.

So we work around this.

Instead of trying to force ourselves to drop the lower jaw, we learn how to raise the upper one! And Lo! The jaws get looser.

This act is accomplished by tilting the head back (technically, extending the neck). One uses the muscles of the neck.

Here's how to understand it:

The lower jaw and tongue participate in swallowing; that makes them more part of the throat than of the head. So a large part of freeing the jaws involves relaxing the tongue and throat. Muscles that attach to the base of the head in the back (occiput) go to the neck.

Another oddity: the jaws and eyes are connected. The muscles of the head and neck are most at equilibrium when the neck is most elongated (giving the impression of near-verticality) and the jaws and eyes are centered and relaxed.

A final word: there is no "socket" for the jaw joints; that is, the lower jaw is held up against the joint by a "sling" of muscles that maintains a constant low-level contraction (in most people, except "the slack jawed"). As the jaw opens, the jawbone first pivots in the joint (the "TMJ"), then slides forward against the underside of a "rail" formed by the cheek bones, which go back nearly as far as the ears. As the jaws open fully, the chin protrudes slightly forward.

Let's get into these movements, and you will see what I mean.

OPENING and CLOSING

THE ESSENCE OF THIS MOVEMENT: separating the jaws by moving the upper teeth away from the lower teeth

STARTING POSITION: supine (on your back), knees up/feet planted, arms outstretched widely

1. Turn the palms of both hands up. Take a breath.
2. Exhale and roll your arms like rolling pins, palms down, then even further.

Notice your ribs flatten as your neck curves forward. Allow your head to tip back naturally. Feel your shoulders lift off the ground.

3. Inhale and roll your arms palms up, then even further.

Notice your ribs lift as your chin tucks toward your neck, which flattens down. Your shoulders drop down and tuck under your chest.

Alternate this move a few times to get familiar.

4. Now, roll your arms palm down as you tip your head back; deliberately separate your jaws by opening your mouth *at the same speed as you tip your head back.*

⇒ Look at your eyebrows.

5. Roll your arms palm up as you tuck your chin; deliberately close your mouth *at the same speed as you roll your arms.*

⇒ Look down your nose.

Alternate this move until you can perform it smoothly to your satisfaction.

FORWARD and BACKWARD JAW MOVEMENTS

ESSENCE OF THIS MOVEMENT: the feeling of pulling the lower jaw toward the adam's apple, then stretching it forward

STARTING POSITION: supine (on your back), knees up/feet planted, arms outstretched widely

(1. - 3.) same as preceding exercise

1. Turn the palms of both hands up. Take a breath.
2. Exhale and roll your arms like rolling pins, palms down, then even further.

Notice your ribs flatten as your neck curves forward. Allow your head to tip back naturally. Feel your shoulders lift off the ground.

3. Inhale and roll your arms palms up, then even further.

Notice your ribs lift as your chin tucks toward your neck, which flattens down. Your shoulders drop down and tuck under your chest.

Alternate this move a few times to get familiar.

4. Roll your arms palm up as you inhale; deliberately thrust your chin forward *at the same speed as you roll your arms.*

⇒ Look at your eyebrows.

5. Now, roll your arms palm down as you tuck your chin; deliberately pull your lower jaw back toward your adam's apple *at the same speed as you roll your arms.*

⇒ Look down your nose.

Alternate these movements until you can perform them smoothly to your satisfaction. Work within your comfort zone, more gently each time. (See "The Teasing Technique", Helpful Introductory Ideas, page 8.)

SIDE-TO-SIDE JAW MOVEMENTS

ESSENCE OF THIS MOVEMENT: matching the feeling of pulling the lower jaw to the side to that of *looking* to the side, using the eyes

STARTING POSITION: supine (on your back), knees up/feet planted, arms laid back by the sides of your head -- comfortably

1. Practice looking hard left and hard right without turning your head.

Do this until you feel the muscular action in your eye sockets. Identify where you feel it in both eyes.

2. Practice moving your lower jaw side-to-side.

If necessary, use your hands to get a feel for the movement.

Do this until you feel the muscular action in your jaw joints. Identify where you feel it in both directions.

3. **Move:**

- eyes right, jaw left (until you can do it easily)

4. Match up the intensity of jaw sensation with eye socket sensation by regulating the amount of effort you exert.

To do so, put your attention first on one sensation, then on the other, then on both simultaneously.

⇒ Gradually decrease the amount of effort of both.

5. Slowly turn your head the direction you are looking.

You may feel a dizzy-sensation. Relax into it. Notice where else you feel it!

Repeat the preceding steps with the following combinations.

- eyes left, jaw right (until you can do it easily)
- eyes right, jaw right (until you can do it easily)
- eyes left, jaw left (until you can do it easily)

COORDINATING YOUR PELVIS AND HEAD

“BASEBALL DIAMOND” (T. Hanna)

THE ESSENCE OF THIS MOVEMENT: smooth control of pelvic movements in all directions

STARTING POSITION: lying on your back, knees up & together, feet down

1. By rocking your pelvis forward and backward, lift and lower your waistband and find the midpoint of the back of your pelvis (the sacrum) in the “up and down” direction.
⇒ Go equal amounts each direction and taper off toward the center.
2. By swaying your knees side to side along that midpoint, find the midpoint of the back of your pelvis in the side-to-side direction.
3. Rock your pelvis slowly and equal distances from that midpoint.

5 times or so

4. Sway your pelvis side-to-side slowly and equal distances from that midpoint.

5 times or so

Imagine that the midpoint is the pitcher’s mound of a baseball diamond.

à Pitcher’s mound: center of your sacrum (between your tailbone and waistband and between your buttocks)

à home plate: your waistband

à first base: at your right hip joint

à second base: at your tailbone

à third base: at your left hip joint

5. Go from “the pitcher’s mound” (center) to:

- 1st base (3 times)
- 2nd base (3 times)
- 3rd base (3 times)
- home base (3 times)

6. Repeat (5.) in reverse.

Run the bases (square) (4 times, total)

VARIATIONS:

A) Repeat in reverse.

B) Repeat, “running wide in the baselines” (a round pelvic movement).

C) Repeat (B) in reverse.

NOW, ADD THE HEAD...

Now, imagine that the back of your head is like the back of your sacrum. The point squarely at center is the pitcher's mound.

1. By nodding your head, lift and lower your chin and find the midpoint of the back of your head.

Move equal amounts each direction and taper off toward the center.

2. By turning your head side to side along that midpoint, find the midpoint of the back of your head in the side-to-side direction.

Move equal amounts each direction and taper off toward the center.

3. Nod your head slowly and equal distances from that midpoint.
(5 times).

4. Turn your head side-to-side slowly and equal distances from that midpoint.
(5 times)

Imagine that the midpoint is the pitcher's mound of a baseball diamond.

5. Go from "the pitcher's mound" (center) to:

- 1st base **(3 times)**
- 2nd base **(3 times)**
- 3rd base **(3 times)**
- home base **(3 times)**

VARIATIONS:

A) Repeat (5.) in reverse.

B) Repeat, running wide in the baselines (round).

C) Repeat (B) in reverse.

Now, get ready to combine the movements of your head and your pelvis. Go slowly and methodically.

1. Rock your pelvis left, head right.
2. Turn your tailbone down, chin down.
3. Rock your pelvis right, head left.
4. Turn your tailbone up, chin up.

As you get better, speed up, first moving in a square pattern, then in a round pattern.

Do the sequence in the reverse direction.

NEXT POSITION: feet together, knees spread wide

Repeat “running the bases”.

NEXT POSITION: knees up again

Repeat “running the bases” fast (with abandon).

FREEING YOUR HIP JOINTS

THE ESSENCE OF THIS MOVEMENT: getting the feeling of loosening and pleurably stretching the muscles of the front of the hip joints (near the groin)

STARTING POSITION: lying on your back, knees up, feet down and spread to about double shoulder width

1. Slowly drop one knee to the center.

If it touches your other leg, spread your legs further apart.

⇒ Extend the arm of the active side alongside your head. Reach.

⇒ Turn your face toward the side away from the leg you have dropped to the center (your “passive” side).

2. Slowly bring your leg back up to center and relax the arm you have reached.

Do 5 times, then switch legs and arms.

3. Repeat with both arms up by your head.

⇒ At full leg-rotation, alternately stretch your arms.

Feel the sensations in your turned hip.

Do 5 times, then switch legs.

4. Repeat with the arm of the passive side at your side and *pressing down*.

Do 5 times, then switch legs and arms.

NEXT POSITION: same position as above, resting on your elbows (arms against your sides, elbows bent and pulled back)

1. Slowly drop one knee to the center.
⇒ Turn your face toward the passive side.
2. Slowly bring it back up to center.
3. Alternate legs.

Do 5 times.

VARIATION:

Look over the shoulder of the active side; turn with your neck and spine.

Feel the place where your neck and shoulders meet.

Switch legs.

NEXT POSITION: lean back on your hands

1. Slowly drop one knee to the center.
2. Slowly bring it back up to center.

Do 5 times.

VARIATION:

Look over the shoulder of the active side; turn with your neck and spine.

Switch legs and repeat.

FREEING YOUR S-I (Sacro-Iliac) JOINTS

This movement builds upon the preceding one.

The left and right S-I joints are the places where the hip bones (the large flares of bone at your waist) meet in back at your sacrum (the bone between and above your buttocks and just below your waistline).

THE ESSENCE OF THIS MOVEMENT: The feeling created is one of lifting and opening the front of the hip joint, followed by a luxurious inward turning of the thigh that spreads the back of the S-I joint and twists the whole spine, followed by a relaxation to a straight, flat back on the floor.

STARTING POSITION: lying on your back, knees up, feet down and spread to about double shoulder width, arms laid back, elbows bent to 90 degrees (square angle)

1. Slowly lift the hip of one side (let's call that "the active side") by planting the foot and pushing the knee forward.

You will feel a stretch in the front of the hip joint, as your hip lifts.

2. Staying lifted, slowly drop the knee toward the center.

⇒ Make sure the other leg stays upright, foot planted flatly at all times.

⇒ Turn the active side foot "outside edge up". (Tighten the muscles of the outside of the calf near the ankle.)

⇒ As you press your knee down, turn your head toward the active side.

⇒ Press the shoulder of the active side down.

3. Allow your active side hip to come down.
4. Slowly roll back to center, knee upright, foot flat.

In this movement, the knee moves in a circular way:

- *knee away from your chest*
- *knee down toward the center*
- *knee back toward your chest*

- *knee upright*

Try it and these words will make more sense.

Do 5 times.

Switch sides and repeat.

VARIATION

THE ESSENCE OF THIS MOVEMENT: By performing the parts of this movement together and *with equal strength*, you will awaken feeling at your groin and deep in your pelvic region at the S-I joint. You will finish feeling looser in the sacral area (above and between the buttocks, just below your waistline).

STARTING POSITION: lying on your side, knees bent and forward, knee of the topside leg on the floor in front of the other knee

1. Press down onto the floor with your topside knee.

Hold it long enough to feel the muscular effort, then relax.

2. Repeat until you can feel from where you move to create that movement.

3. Tighten the small of your back until you create an arch.

The belly relaxes. Hold it long enough to feel the muscular effort, then relax.

4. Repeat until you can feel from where you move to create that movement.

5. Lift your head and tip it all the way back.

Hold it long enough to feel it in the place where your neck and shoulder meet, then relax.

6. Repeat until you can feel from where you move to create that movement.

7. COMBINATION MOVE: Press your topside knee down as you tighten the small of your back.

⇒ As you press your topside knee down, lift the underside knee up.

Apply equal strength to both movements and hold them long enough to feel the effort as a single action, then relax.

8. Repeat until you can feel from where you move to create that movement.

9. FINAL COMBINATION MOVE: Press your topside knee down, tighten the small of your back, and lift your head.

Apply equal strength to all the movements and hold them long enough to feel the effort as a single action, then relax. Feel the sensation at the groin and the S-I joint.

10. Repeat until you can feel from where you move to create that movement.

Turn on your back and rest. Get an impression of your body. Compare how the right and left sides feel lying on the floor.

Switch sides and repeat.

THE CAT TWIST

Many times, you may have seen a cat roll around on the floor. There is a good reason for this, as you will soon find out.

THE ESSENCE OF THIS MOVEMENT: movement of your legs and hips independently from your arms and shoulders; the ability to shift the air in your lungs from side to side

EXPECTED OUTCOME: more flexibility in twisting, better-coordinated abdominal muscles, and improved breathing capacity

PREPARATION FOR THE “CAT TWIST” MANEUVER

STARTING POSITION: side-lying, “underside” leg straight, “topside” leg bent at the knee; foot resting on the inside surface of the other knee, one hand cradling your head from beneath, the other hand resting on the other arm’s elbow

1. Lift the knee of your topside leg; brace yourself with your arm or arms.
2. Slowly let your knee come down. **(2 times)**

Feel your whole torso begin to turn. You will feel the muscles of the waist and ribs working.

3. Bend your knee a little more, and repeat **(2 times)**.

Keep your foot resting on the inside surface of your other leg.

4. Bend your knee a little less, and repeat. **(2 times)**

NEXT POSITION: everything the same, except: foot of the topside leg resting in front of the other leg (repeating the previous sequence:)

1. Lift the knee of your topside leg; brace yourself with your arm or arms.
2. Slowly let your knee come down. **(2 times)**

Feel your whole torso begin to turn. You will feel the muscles of the waist and ribs working.

3. Bend your knee a little more, and do **2 times**.

Keep your foot resting on the inside surface of your other leg.

4. Bend your knee a little less, and do **2 times**.

Turn on your other side and repeat the entire sequence.

THE “CAT TWIST” MANEUVER

Use this movement to relax progressively into a twisted position.

NEXT POSITION: sidelying, fingers of both hands interlaced above your head, elbows together, knees bent and ankles together

1. Slowly swing your topside elbow up and across until it rests upon the floor on the opposite side.

Gently, ending in your most relaxed state. Feel the muscles of your torso working.

⇒ Inhale into your chest on the top side as you swing across.

2. Swing your knees across until they rest on your opposite side.

Feel the muscles of your torso working.

⇒ Inhale into your chest on the underside as you swing your legs over.

3. Swing your other elbow up and across until it rests upon your other elbow, again.

⇒ Exhale as you swing across.

Repeat the movements in the opposite direction.

VARIATIONS:

A) Keep your head snug against the topside arm as you swing over.

B) Keep your head snug against the underside arm as you swing over.

C) Keep your nose and knees pointed the same direction as you move.

COORDINATING THE BODY'S RIGHT AND LEFT "CYLINDERS"

The body can be felt as two side-by-side cylinders: the right side (from foot to the right eye and brain) and the left side. This exploration coordinates those two cylinders (the left and right sides).

THE ESSENCE OF THIS MOVEMENT: feeling the left and right sides of the body working independently, and yet in coordination

STARTING POSITION: lying on your back, knees bent and together, arms parallel, extended upward, palm-to-palm

1. Rub your knees, forearms, and palms against each other.
 - ⇒ Hand and knee of the same side move together.
 - ⇒ Hand and knee of the same side move opposite directions (torso twists).

NEXT POSITION: lying on your back, soles of your feet touching, hands behind your neck

1. Roll onto one side, bringing your knees and elbows together.

Your arms and legs are now together.
2. "Unfold", so you spread your arms and legs.

Keep the knee and elbow of each side in line with each other. You are now spread out on your back.

Do four (5) times, total.

Switch sides and repeat.

INDEPENDENT CONTROL OF YOUR HEAD, HIPS AND SHOULDERS (T. Hanna)

You definitely need to have somebody read these instructions to you.

THE ESSENCE OF THIS MOVEMENT: independent coordination of the movements of your limbs and head

STARTING POSITION: lying on your back, knees up & together, feet planted

- 1 = head
- 2 = left shoulder
- 3 = left hip
- 4 = right hip
- 5 = right shoulder

The following sequence has two stages:

Lifting (contracting the muscles of the front).

Pressing down, arching your spine (contracting the muscles of your back).

Lift and press the following body parts down in the following order.

Do each movement 2 times total, unless instructed otherwise.

- | | |
|------------|-------------------------|
| 1. 1 ==> 2 | head : L shoulder |
| 2. 1 ==> 5 | head : R shoulder |
| 3. 1 ==> 3 | head : L hip |
| 4. 1 ==> 4 | head : R hip |
| 5. 2 ==> 5 | L shoulder : R shoulder |
| 6. 2 ==> 4 | L hip : R hip |

- | | |
|-------------------------------|---|
| 7. 1 ==> 3 ==> 4 | head : L hip : R hip |
| 8. 1 ==> 4 ==> 3 | head : R hip : L hip |
| 9. 5 + 4 | L shoulder + R hip [simultaneously, 5 times] |
| 10. 5 + 3 | R shoulder + L hip [simultaneously, 5 times] |
| 11. 1 ==> 3 + 5 | head : [L hip + R shoulder][simultaneously] |
| 12. 1 ==> 4 + 2 | head : [R hip + L shoulder][simultaneously] |
| 13. 4 ==> 5 | R hip : R shoulder (roll) |
| 14. 3 ==> 5 | L hip : L shoulder (roll) |
| 15. 3 ==> 5 ==> 2 ==> 4 ==> 1 | L hip : R shoulder : L shoulder :
R hip : head |
| 16. 2 ==> 4 ==> 3 ==> 5 ==> 1 | R hip : L shoulder : R shoulder :
L hip : head |

HIP & SHOULDER MOVEMENT INTEGRATION

This wonderfully sensuous exploration is a pure pleasure to do and leaves you feeling really terrific afterwards.

THE ESSENCE OF THIS MOVEMENT: reaching and withdrawing movements that you feel coming from the center of your torso

EXPECTED RESULTS: flattens your back, improves front:back balance

STARTING POSITION: lying on your back, knees up and together, elbows at shoulder level bent to 90 degrees, forearms flat on the surface

Defining the edges of your sacrum

1. Feel where your pelvis contacts the surface, and roll up and down the edge of your ilio-sacral joints.

The ilio-sacral joints are the hard, bony ridges on the back of your pelvis, left and right.

◇ left (10 times)

◇ right (10 times)

⇒ Note that your opposite shoulder slides back and down as your back arches.

Shoulder pass (5 times):

1. Choose the side to work with.
2. Stretch your elbow away from your shoulder.
3. Turn your face to the opposite side.
4. Press the forearm (of your reaching arm) down.
5. Ease off and transfer the pressure across to your other arm.
6. Switch sides and repeat.

Diagonal transfer (5 times)

Same as Shoulder Pass, above, except transfer the force diagonally between your shoulder and the same-side hip.

Hip lift:

1. Press down with one foot so your hip comes up.

Keep your legs parallel and your knees up. Come up as high as you can and hold it.

2. Slowly let your hip come down.

(5 times, total)

3. Lift and pause in place.
4. Slowly let the your passive leg down to the side.
5. Slowly bring the knee of the passive leg back up.

Repeat (4. and 5.) 4 more times.

6. Now, slowly let your hip come down.

Switch sides.***Shoulder lift (5 times):***

1. Extend your arms straight up, toward the sky.
2. Reach straight up with the arm and shoulder opposite the hip you just lifted.
3. Slowly let your shoulder sink 'till it touches the floor.

Switch sides.***Shoulder downward press (5 times):***

1. Extend your arms straight up, toward the sky.

2. Pull back into the surface with the arm and shoulder *opposite* the hip you just lifted.
3. Slowly relax.

Switch sides and repeat

Diagonal transfer (5 times total):

1. Simultaneously lift one hip and the opposite shoulder.
2. Relax and repeat.

Switch sides.

Diagonal transfer variation (5 times total):

1. Simultaneously pull down one hip and the opposite shoulder into the surface.
2. Relax and repeat.

Switch sides.

Diagonal transfer fast alternation:

1. Simultaneously pull down one hip and the opposite shoulder into the surface.
2. Switch sides
3. Alternate rapidly until you have easy coordination in the movement.

Relax and repeat.

Hip tuck:

1. Bring your hip joint toward your ear.
Tighten and relax **5 times or so**.
Strongly use and feel the muscles that run up the sides of the ribs.
2. Rest and compare sensations of your left and right sides.
3. Slowly relax that side and bring the opposite hip up.
Tighten and relax **5 times or so**.
4. Bring one shoulder toward the hip of the same side.
Tighten and relax **5 times or so**.
⇒ Strongly use and feel the muscles that run up the sides of the ribs.
⇒ Let your head tip so your ear follows the shoulder.
5. Slowly relax that side and do the *opposite* shoulder.
Tighten and relax **5 times or so**.

Hip & Shoulder Link (5 times, total):

1. Slowly and strongly bring the hip and shoulder on one side toward each other.
 - ⇒ Strongly use and feel the muscles that run up the sides of the ribs.
 - ⇒ Let your head roll to that side.

Switch sides and repeat.

Rapid integration:

1. Repeat the previous movement many times, alternating sides rapidly.

Rest

Stretch out your legs and arms so you form an “X” and relax for a while.

NOTES

NOTES

THE LEGS

introductory ideas

Balance and coordination of the legs is essential for relaxed, erect posture. Without it, a person feels unstable and off-balance, which leads them to tighten up, distorting posture and movement.

The feet, in particular, must meet the ground squarely, in a relaxed fashion, when standing. The structure of the feet determines how they bear weight. The thickest part of the foot is the heel; the next thickest is the inside, front-to-back arch (inside three toes); and the least thick is the outside, front to back arch (outside two toes). Standing at balance, weight is distributed approximately as follows:

- ◇ heels: 65%
- ◇ inside arch: 25%
- ◇ outside arch: 10%

The toes have two major functions: fine-tuning balance and providing propulsion in walking.

The toes help balance by lifting or by “biting down” on the ground, as needed. They trigger the springiness of the feet in walking through (sensory-reflexive) integration with the muscles of the lower leg -- and provide propulsion, primarily through the three toes of the inside arch.

The two arches, together, form the recognizable front-to-back arch for which some people need arch supports. They also form a side-to-side arch at the first toe joints, which provides flexibility for the feet to adjust to uneven surfaces.

One reason people need arch supports is that the muscles of the calves (which go into the feet) form the arch by tightening, and in many people, these muscles are only partially functional. Another reason people need arch supports is that the muscles of the calves outside the ankle are too tight and force the feet to roll inward. In both cases, the problem lies in the calves; it can often be resolved by improving muscular functioning.

Another reason feet fail to meet the ground squarely is that the calves are rotated outward (feet roll inward) or rotated inward (feet stand on the outside

edge). This condition arises from tight hamstrings. To test yourself, sit with feet flat on the floor and deliberately roll sideways along the underside of a foot. Notice what's involved. See the section on hamstrings for maneuvers to improve hamstring functioning.

Check the soles of your shoes for their wear pattern and see if your feet meet the ground squarely, or if they meet unevenly, indicating balance problems.

Another important item: the structure of the ankle joint (as a saddle joint) dictates that the most efficient movement of the foot in walking occurs when it points straight-forward. This position also causes the knee and hip joints to move along lines of greatest efficiency and least muscular strain. The weight distribution described above (65%/25%/10%) occurs when the foot is thus positioned when standing and walking. Deviations from this position occur when the person is off-balance to one side or the other. In that case, the foot of the more weight-bearing side tends to turn out to counter the state of being off-balance to that side. It is pointless to attempt to straighten the feet until the weight distribution is better centered.

Finally, a word on walking: Never “lift” your feet in walking; leave the foot of the hind leg down until your weight is transferred to the front foot. The knee of your hind leg will swing forward as a pendulum, carrying you forward with its momentum; as your weight passes from the heel to the toes of the hind foot, a natural muscular response puts spring in your step. This spring increases with the angle of the ankle, so a longer stride puts more spring in your step ***if you leave your hind foot down until it springs forward.***

The first explorations in this section improve foot contact with the ground. To do them, you need sufficient freedom of movement in your hip joints. If necessary, you can develop it by doing the exercises found in Dr. Hanna's book, Somatics: Re-awakening the Mind's Control of Movement, Flexibility and Health.

HIP JOINTS & HEELS: THE “Z” POSITION

The following movements increase freedom at the hips and help square the heels with the surface of the earth. If you lack sufficient freedom of the hip joints to do this movement, do the somatic transformations found earlier in this guidebook and in Dr. Hanna’s book, Somatics: Re-awakening the Mind’s Control of Movement, Flexibility and Health.

THE ESSENCE OF THIS MOVEMENT: smooth foot movement and good ground contact

STARTING POSITION: sitting on the floor

1. Prop yourself on your arms and bring your knees together.
2. Spread your feet to shoulder-width.
3. Drop one knee in and one knee out.
The foot of the “out” knee now rests against the “in” knee.
4. Sit up. You are now in “Z” position
5. Place your hands on your “inside” knee.
6. Lift that knee.
7. When you have some height, relax slightly. Lift again and this time, resist with your hands.
⇒ Bow your head toward the knee and lean that direction.
⇒ Keep your sitbones* down as evenly as possible.
8. Slowly let your knee come back down. You may need to go ½” at a time.
9. When completely down, squeeze your knee against the surface.
⇒ Pull up on the knee with your hands as you push down with the leg.

Repeat the entire sequence.

* two bony prominences deep to the creases (“smiles”) of your buttocks

NEXT POSITION: (the only change:) place a hand on the ankle of the “inside” leg.

1. Lift the heel of that foot by pressing the side of the big toe into the ground.
2. When you have some height, relax slightly. Lift again and resist with your hands.

⇒ Bow your head toward the foot and lean that direction.

3. Slowly let your heel come back down.

⇒ Flex and straighten your ankle in a “foot-tapping” motion.

4. When down, flex your ankle back and forth, continuing to lean on it with your hand.

Get the feeling of rubbing the inside surface of your foot, toe to heel, against the ground.

Repeat the entire sequence.

Do both sequences on the other leg.

BASIC HAMSTRING RELAXATION MOVEMENT (T. Hanna)

THE ESSENCE OF THIS MOVEMENT: balanced counter-tension between your working leg and your arms and smooth movement

STARTING POSITION: sitting on the floor with one leg bent and dropped to the side.

Draw your straight leg up enough to permit you to grasp your foot with both hands; your finger tips meet at your sole, at the ball of your foot. Get a firm grip, and you are ready to begin. Work patiently *within your comfort zone*.

1. Holding your foot firmly, *gently* push with your leg, so that your arm and shoulder stretch long. Hang your head forward. Work gently to the edge of your flexibility.
2. Now, gradually relax your push, let your knee bend, and take up the slack by drawing your leg up with your hands. Tip your head 'way back.

It's a kind of moving isometric exercise.

3. Now, with your leg, push and straighten, again, maintaining some pull with your hands. Bow your head forward as you straighten your leg.

You'll notice that with each repetition, you get a little further. You're gaining feeling and control of the muscular tension in your hamstrings. Remember to move slowly enough and just strongly enough to feel the muscle-action clearly.

After about ten *slow motion* repetitions, stand up and feel the difference between your two legs. Walk. Notice the difference in how your legs feel.

Now, do your other leg.

VARIATIONS: (Each position increases awareness and control.)

- sitting
- on your back
- on your sides

NEXT STEP: Balancing the Foot to Relax the Lower Leg

STARTING POSITION: (as on page 131), sitting on the floor with one leg bent and dropped to the side.

Draw your straight leg up enough to permit you to grasp the sole of your foot with both hands; your fingertips meet at your heel at the pivot point of foot movement. To find the pivot point, pull upward into your heel with your fingers, then flex and extend your foot; position your fingertips so their pressure neither causes your ankle to flex nor prevents it from flexing.

Repeat the procedure shown on page 131.

VARIATIONS: (Each position increases awareness and control.)

- sitting
- on your back
- on your sides

LEG/BACK EXTENSION FOR LOOSER HAMSTRINGS **(Carol Welch, C.H.S.E.)**

EXPECTED RESULT: More solid leg support

THE ESSENCE OF THIS MOVEMENT: coordinating the movements of your legs with those of your arms and shoulders

STARTING POSITION: lying on your back, knees up

1. Grasp one foot from the front with the hand of the same side.
2. Place your opposite hand behind your neck.
3. Straighten and bend your knee; hold on with your hand. **(5 times)**
 - ⇒ Inhale to straighten; exhale to bend.
 - ⇒ Work within your comfort zone and feel it expand.
4. Point your elbow forward, then to the side, like a wing. **(5 times)**
5. Combine (1. - 3.):
 - ⇒ Point your elbow at your knee as you straighten it (exhale).
 - ⇒ Lay your elbow out as you bend your knee (inhale).
 - ⇒ Arch your back.

VARIATION: (L. Gold)

- ⇒ Point your elbow at your knee as you bend it (exhale).
- ⇒ Lay your elbow out as you straighten your knee (inhale).
- ⇒ Arch your back.

Feel the rocking movement along your spine. Notice how it feels at your waistline and at the base of your neck.

4. Rest and compare sensations of your left and right sides.

Repeat the entire sequence for your other side.

VARIOUS POSITIONS IN WHICH TO DO THIS MOVEMENT:

à on your back (10x/leg)

à on your left side (7x/leg)

à on your right side (7x/leg)

à sitting (5 times/leg)

NEXT POSITION: sitting, one knee up, one leg bent and dropped out to the side, both hands grasping the foot of the “knee up” leg (T. Hanna)

1. Straighten the “knee-up” leg.
 ⇒ Exhale.
 ⇒ Bow your head down.
2. Bend that knee, again.
 ⇒ Inhale.
 ⇒ Bring your head up and back.

Do (1. and 2.) 5 times.

3. Straighten and flex the knee-up leg. (5 times)
 ⇒ As you straighten, stroke down the leg with the opposite hand.
 Face the fingers away, so the leg contacts the web between thumb and index finger.
 ⇒ Exhale with each stroke.
 à outside surface of the leg
 à inside surface of the leg
 à front of the leg
4. Switch hands and repeat. (5 times)
5. Repeat (1. - 3.) 2 more times.

Switch legs and hands and repeat (5 times)

6. Switch hands and repeat. (4 times)

HAMSTRING/BODY SWEEP: “THE ‘V’” (T. Hanna)

STARTING POSITION: sitting, both legs straight, spread in a ‘V’, hands on your knees.

1. Exhale and lean forward to center.
2. Inhale and sweep to one side and up.
⇒ Feel the weight on your sitbone, (under your buttock).
3. Exhale and sweep down and to the center.
⇒ Make sure your head participates in the movement.
4. Inhale and sweep to the other side and up.
⇒ Feel the weight shift to the other sitbone.

Do 10 times, total.

THE ATHLETE'S PRAYER FOR LOOSE CALVES

This movement, a variation on the usual “gastroc stretch” by which athletes attempt to loosen their calves, is a bit more effective than the usual method and has the advantages of putting more spring in the step and improving foot-ground contact.

THE ESSENCE OF THIS MOVEMENT: coordinating (synchronizing) the movements of the toes with those of the foot and ankle

STARTING POSITION: standing, hands pushing against a wall or a post at shoulder height, feet pointing straight-forward, one foot about two feet behind the other (so the ankle, hip, shoulder and ear line up) the knee of the front leg bent, head in line with the torso (not looking at the wall or looking down). Two-thirds (2/3) of your weight goes to the hind leg.

1. Raise the heel of your back leg so the weight rests upon the ball of your foot (behind the toes).
 - Push the wall to send more force through your foot.
 - Gently grip the floor with your toes.
2. Gradually relax your toes and lower your heel ½” or so.
3. Grip the floor with your toes, again.
4. Ease off and lower your heel some more.

Repeat the cycle of contracting and relaxing until your heel touches down.

⇒ Aim so your heel touches the ground squarely (on neither the outside nor inside edge).

5. When you are down, sink into the ground and let your foot go soft and spread.
6. Wiggle your toes.
7. Repeat.
8. Walk. Observe differences between the legs.

Switch sides.

VARIATIONS:

Turn your heel:

à out

à in

As you do, feel the effect in the arches of your foot. Turn the heel to find a cramp in your calf and work in that position to relieve it.

Repeat as desired.

RUBBING THE FEET

This maneuver helps to relax the feet for better ground contact in standing and walking. Notice how the body's parts seem designed to fit together.

THE ESSENCE OF THIS MOVEMENT: relaxing the foot being rubbed so you get better ground contact

STARTING POSITION: standing at balance or leaning slightly sideways on a support surface

DEFINITIONS: (You'll need these to understand the instructions.)

- **“ball of the foot”:** the big joint behind the big toe
- **“arch of the foot”:** the hollow on the inside surface of the foot that passes toward the center of the foot and forward, near the ball of the foot
- **“achilles tendon”:** the thick strap of tissue that goes from the back-center of the heel to the calf of the leg
- **“instep”:** the place where the front of the ankle and the top of the foot meet
- **“weight-bearing foot”:** the foot on which you are standing
- **“free foot”:** the other foot

1. With the ball of the free foot, rub the weight-bearing foot directly beneath the inside knob of the ankle bone in a forward-and-back motion.
⇒ Relax the foot being rubbed.
Continue until the foot being rubbed relaxes.
2. With the ball of the free foot, rub the weight-bearing foot directly behind the inside knob of the ankle bone (in front of the achilles tendon) in an upward-downward motion.
Continue until the foot being rubbed relaxes further.
3. With the sole of the free foot, rub the weight-bearing foot along the instep (top) back and forth from front to back, all the way up the front of the ankle joint.
⇒ Relax the foot being rubbed.
Continue until the foot being rubbed relaxes further.
4. With the outside edge of the free foot, rub the weight-bearing foot directly beneath the outside knob of the ankle bone in a forward-and-back motion.
Continue until the foot being rubbed relaxes further.
5. Walk and sense the change in the rubbed foot.

Switch feet and repeat.

CIRCLES (WALKING COORDINATION) (T. Hanna)

THE ESSENCE OF THIS MOVEMENT: the feeling that the hips and shoulders are “geared” to each other in walking

STARTING POSITION: lying on your back, knees up, feet down and close together, arms at sides

1. S-l-o-w-l-y lift your right shoulder off the floor.
2. S-l-o-w-l-y let it down.

Do 4 times.

3. S-l-o-w-l-y press your right shoulder into the floor.
4. S-l-o-w-l-y relax.

Do 4 times.

5. S-l-o-w-l-y shrug your shoulder toward your ear.
6. Relax and

Do 4 times.

7. S-l-o-w-l-y reach toward your ankle.
8. Relax

Do 4 times.

Repeat entire sequence for the opposite shoulder.

9. Backward shoulder rolls (slow motion).
 - ◇ one shoulder
 - ◇ the other shoulder

Go for circularity.
10. Both shoulders (shoulder wiggle)

- ⇒ a. Imagine that your shoulders are the two ends of a baton.
- ⇒ b. As you move one shoulder forward, move the other back.
- ⇒ c. As you shrug one shoulder up, move the other down.

Continue until smooth, coordinated, and circular.

11. S-l-o-w-l-y lift your right hip off the floor.

12. S-l-o-w-l-y let it down.

Do 4 times.

13. S-l-o-w-l-y press your right hip into the floor.

14. S-l-o-w-l-y relax.

Do 4 times.

15. S-l-o-w-l-y draw your hip up toward your shoulder.

16. Relax.

Do 4 times.

17. S-l-o-w-l-y stretch your leg long, reaching from your diaphragm.

18. Relax.

Do 4 times.

Repeat the entire sequence for the opposite hip.

FORWARD HIP ROLLS (slow motion)

1. First hip

Go for circularity.

2. Other hip.

Go for circularity.

3. Both hips (hip rolls: bicycle pedaling movement)

Imagine that your hips are the two ends of a baton.

⇒ As you move one hip forward, move the other back.

⇒ As you stretch your waist long on one side, pull the opposite hip toward your waist.

Continue until smooth, coordinated, and circular.

NEXT POSITION: one knee bent (up), the other leg straight

1. Now, as you straighten the bent leg, drag the opposite heel toward you.
2. Then reach with that leg and drag the opposite heel up.
3. Continue the movement, going for a circular, rolling motion.

Let your shoulders help in the movement.

NEXT POSITION: on your side

You are about to combine the hip and shoulder rolls you have just practiced.

1. Forward shoulder rolls (slow motion, one shoulder).

⇒ The elbow rubs your side in a circle.

Go for improved circularity.

2. Forward hip rolls (slow motion, other shoulder).

⇒ One knee rubs around the other knee in a circle.

Go for improved circularity.

Connect your hips and shoulders:

As you pull your shoulder footward, draw your hip headward so you contract your entire side.

Contract and relax 4 times.

(continued, next page)

VARIATIONS (DO ALL):

- ⇒ As you move your shoulder backward, push your hip forward.
- ⇒ As you move your shoulder headward, push your hip footward.
- ⇒ As you push your shoulder forward, pull your hip backward.
- ⇒ As you pull your shoulder footward, draw your hip headward.

Move in a grinding, circular motion, feeling as if the shoulder and hip were meshing gears. Use the whole body.

4. Backward shoulder rolls (slow motion, one shoulder).

⇒ The elbow rubs your side in a circle.

Go for improved circularity.

5. Backward hip rolls (slow motion, other shoulder).

⇒ One knee rubs around the other knee in a circle.

Go for improved circularity.

6. Combine the two:

As you pull your shoulder footward, draw your hip headward so you contract your entire side.

Contract and relax 4 times.

VARIATIONS (DO ALL):

- As you move your shoulder forward, pull your hip backward.
- As you move your shoulder headward, pull your hip footward.
- As you pull your shoulder backward, push your hip forward.
- As you pull your shoulder footward, draw your hip headward.

THE AMAZING WALKING MIRACLE

This series of movements coordinates the whole body for efficient walking.

EXPECTED OUTCOME: Lighter, quicker, more graceful walking.

THE ESSENCE OF THIS MOVEMENT: The feeling that walking is initiated from the center of the body; straight-forward/straight-backward movement of the limbs with each step.

TIME TO COMPLETION: 30 minutes

SUMMARY:

- developing straight-*forward* movement of the *right* leg and hip
- coordinating the right leg and hip with the left arm and shoulder
- developing straight-*forward* movement of the *left* leg and hip
- coordinating the left leg and hip with the right arm and shoulder
- developing straight-*backward* movement of the *right* leg and hip
- coordinating the right leg and hip with the left arm and shoulder
- developing straight-*backward* movement of the *left* leg and hip
- coordinating the left leg and hip with the right arm and shoulder

Developing straight-forward movement of the right leg and hip

STARTING POSITION: on your back, arms by your sides, legs close together with your toes pointing straight upward. **NOTE:** You are likely to find that, as you do this exploration, you feel more comfortable with your legs closer and closer together, both lying and standing. When you feel that way, bring them closer together and work in that position.

1. Bring your attention to your right foot. Lift your toes and bend your foot toward your knee.

Feel your foot pull toward the center of your kneecap. Adjust your foot position until you feel this way.

⇒ As you do this, point the toes of your other foot away from you ("down").

2. Relax completely.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

3. Tighten the back of your leg to lift your knee slightly.

Make sure your toes are still pointing straight up.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

4. Combine bending your foot toward your knee with lifting your knee.

The feeling is as if you were lifting your foot to stamp on the ground -- only you are lying down.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

5. Relax completely.
6. With your leg straight, lift it slightly with the toes pointing straight upward. Lower it slowly, intending to feel the progressive relaxation.

Notice where this movement comes from; where do you feel it? Is your belly involved? Is your whole leg involved?

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Coordinating the right leg and hip with the left arm and shoulder

7. Bring your attention to your left arm and shoulder
8. Lift your arm and shoulder “forward” off the surface, as if you were walking.

Be sure to lift your shoulder. Feel the muscles of the left side of your chest lift the shoulder.

9. Lower your arm and shoulder gradually.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

10. Combine lifting your left arm and right leg.

Synchronize the movements. Move slowly. Feel where the movement comes from.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Developing straight-forward movement of the left leg and hip**STARTING POSITION: on your back with your toes pointing straight upward**

1. Bring your attention to your left foot. Lift your toes and bend your foot toward your knee.

Feel your foot pull toward the center of your kneecap. Adjust your foot position until you feel this way.

⇒ As you do this, point the toes of your other foot away from you ("down").

2. Relax completely.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

3. Tighten the back of your leg to lift your knee slightly.

Make sure your toes are still pointing straight up.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

4. Combine bending your foot toward your knee with lifting your knee.

The feeling is as if you were lifting your foot to stamp on the ground -- only you are lying down.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

5. Relax completely.
6. With your leg straight, lift it slightly with the toes pointing straight upward. Lower it slowly, intending to feel the progressive relaxation.

Notice where this movement comes from; where do you feel it? Is your belly involved? Is your whole leg involved?

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Coordinating the left leg and hip with the right arm and shoulder

7. Bring your attention to your right arm and shoulder
8. Lift your arm and shoulder “forward” off the surface, as if you were walking.

Be sure to lift your shoulder. Feel the muscles of the right side of your chest lift your shoulder.

9. Lower your arm and shoulder gradually.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

10. Combine lifting your left arm and left leg.

Synchronize the movements. Move slowly. Feel where the movement comes from.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Developing straight-backward movement of the right leg and hip

STARTING POSITION: Turn over onto your belly, arms at your sides with your head turned left (**ALTERNATE POSITION:** head right), kneecap facing squarely down into the surface so there is pressure on its front surface, legs close together.

1. Bring your attention to your right foot.
2. Contract your foot as if to make it into a fist, then gradually relax it.

Work gently. If you cramp, do less and feel more attentively.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

3. Point your whole foot away from you, as if standing tip-toe. Relax.

Feel the muscles of your calf contract and relax.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

4. Combine the two movements ("making a fist and pointing") as one.
5. Relax.

This combination activates both the large, surface muscles of your calf and the deep layer, which controls the arches of the feet and the toes.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

6. Bend your knee until the lower leg points straight up.
7. Lower your leg slowly, feeling the muscles at the back of your thigh.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

8. Combine all three movements -- foot, calf, thigh.

This movement gives the impression of curling your whole leg backward.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

9. Do the same movement, and now lift your entire thigh off the surface.

⇒ Lift your head at the same time.

Feel how lifting your head helps you to lift your leg. Feel the muscles of your buttock and back working.

10. Relax down.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Coordinating the right leg and hip with the left arm and shoulder

11. Bring your attention to your left arm and shoulder.

12. Slowly, *for the feeling*, lift your arm and shoulder off the surface.

⇒ Lift your head at the same time so your head, arm and shoulder move as a unit.

13. Slowly lower.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

14. Bring your attention back to your right leg.

15. Keep the leg and foot straight and slowly lift and lower until you feel where the movement comes from.

16. Combine this movement with the movements of the head, left shoulder and arm.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Turn on your back and relax.

Developing straight-backward movement of the left leg and hip

STARTING POSITION: Turn over onto your belly, arms at your sides with your head turned right (**ALTERNATE POSITION:** head left), kneecap facing squarely down into the surface so there is pressure on its front surface, legs close together.

1. Bring your attention to your left foot.
2. Contract your foot as if to make it into a fist, then gradually relax it.

Work gently. If you cramp, do less and feel more attentively.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

3. Point your whole foot away from you, as if standing tip-toe. Relax.

Feel the muscles of your calf contract and relax.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

4. Combine the two movements (“making a fist and pointing”) as one.
5. Relax.

This combination activates both the large, surface muscles of your calf and the deep layer, which controls the arches of the feet and the toes.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

6. Bend your knee until the lower leg points straight up.
7. Lower your leg slowly, feeling the muscles at the back of your thigh.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

8. Combine all three movement, foot, calf, and thigh.

This movement gives the impression of curling your whole leg backward.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

9. Do the same movement, and now lift your entire thigh off the surface.

⇒ Lift your head at the same time.

Feel how lifting your head helps you to lift your leg. Feel the muscles of your buttock and back working.

10. Relax down.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Coordinating the left leg and hip with the right arm and shoulder

11. Bring your attention to your left arm and shoulder.

12. Slowly, *for the feeling*, lift your arm and shoulder off the surface.

⇒ Lift your head at the same time so your head, arm and shoulder move as a unit.

13. Slowly lower.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

14. Bring your attention back to your left leg.

15. Keep the leg and foot straight and slowly lift and lower until you feel where the movement comes from.

16. Combine this movement with the movements of the head, left shoulder and arm.

Do five times or until you have a clear sense of control doing this movement and can feel where the movement comes from.

Turn on your back and relax.

FOR THE UPPER EXTREMITIES

THE ED NORTON MANEUVER

A Way to Comfortable Hands, Wrists, and Forearms

One of the conditions leading to carpal tunnel syndrome is excessive habitual tension of the muscles of the forearms, the tendons of which pass through the carpal tunnel in the wrist. These muscles go all the way into the fingers, controlling finger and wrist movements and position.

Long-term, high-speed keystroking leads, for some persons, into such excessive tension – which, by the way, overcompresses the joints of the fingers, leading to the desire to crack ones knuckles.

To prevent carpal tunnel syndrome, keyboardists and those who do repetitive gripping movements in their work should do the Ed Norton maneuver as slowly as possible about every hour or so.

This maneuver frees the forearms, wrists and hands, bringing a kind of “buttery” feel to the hands.

If you have pain already, start gently and do a small amount. As your pain decreases, increase the movements to your new comfortable limit. Never force. This is not a stretch, it is a coordination exercise that frees your muscles and takes strain off of your tendons.

Show these instructions and demonstrate the movements to your physician or physical therapist to be sure you are doing them as written.

THE ESSENCE OF THIS MANEUVER: equalizing the effort you use to grip with your hands with the effort you use to spread your elbows apart (Work within your comfort zone.)

STARTING POSITION: sitting, hands clasped (fingers interlaced) in front of your face, elbows together

1. Grip your hands together firmly. Maintain this grip until instructed to relax it.
2. Spread your elbows until the grip of your hands prevents further spreading.
3. Simultaneously and slowly ...
 - relax your wrists a bit
 - spread your elbows about 2", so your wrists bend backward.
4. Straighten your wrists a bit, keeping your elbows apart.

Repeat Steps 3. and 4. repeatedly, until your wrists are bent backward to your comfortable limit.

5. Relax your hands a bit, so your fingers begin to straighten.
6. Regrip your hands, keeping your elbows in position.

Repeat Steps 5. and 6. repeatedly, until your straightened fingers bend slightly back.

When your elbows are at full width, continue gripping and relaxing, palms down, until your arms are straight. (Do not force. Work within your comfort zone.)

NEW POSITION: hands clasped in front of your chest, palms facing forward, elbows pointing forward

1. Grip your hands together, fingers interlaced.
2. Spread your elbows apart until the grip of your hands prevents going wider.
3. Simultaneously and slowly
 - relax your hands
 - spread your elbows 2"
4. Regrip your hands, keeping your elbows in position.

Repeat Steps 3. and 4. repeatedly.

When your elbows are at full width, continue the movements, pushing your hands forward, until your arms are straight. (Do not force. Work within your comfort zone.)

NEXT POSITION: hands clasped behind your neck, palms facing upward

1. Grip your hands together.
2. Spread your elbows apart until the grip of your hands prevents going wider.
3. Simultaneously and slowly
 - relax your hands
 - spread your elbows 2"
4. Regrip your hands, keeping your elbows in position.

Repeat Steps 3. and 4. repeatedly.

When your elbows are at full width, continue gripping and relaxing, pushing upward, until your arms are straight. (Do not force. Work within your comfort zone.)

Shake your hands out gently. Open and close your hands and feel how much softer they feel.

NOTES

NOTES

INTEGRATION

THE SUPERSCRUNCH

This move is a spectacularly integrative wake-up call, triggering and releasing the three basic neuromuscular responses of stress: the Landau Reaction, the Startle Reflex, and the Trauma Reflex. For more explanation of these three responses, see Somatics: Re-awakening the Mind's Control of Movement, Flexibility, and Health, by Thomas Hanna.

After doing one side, lie on your back and rest. Sense the difference in how the two halves of your body feel.

THE ESSENCE OF THIS MOVEMENT: feeling what it feels like to alternate powerful contractions with reaching long and moving expansively

STARTING POSITION: lying on your side, topside leg straight and in line with your torso, underside arm straight forward, underside leg bent at the knee, which is directly forward of the hip joint

SWINGING THE TOPSIDE ARM

1. Make a fist and draw your topside arm back, as if preparing to deliver a punch.
2. Shrug your (same) shoulder to pull it to the place where your neck and head meet just behind your ear.
3. Lift your head to help your shoulder find that place.
⇒ Exhale.
4. Slowly relax your fist and extend your arm forward.
5. When straight-forward, swing your arm in an arc (elbow straight) forward and beyond your head.

Feel the muscles of your side stretch long.

Repeat Steps (1. - 5.) until the feeling becomes familiar to you.

6. As you swing your arm forward, continue the swing past your head, behind you, and end with your arm at your side. You've just done a circle (a **"forward and up circle"**) with your arm.

Turn your head and torso as necessary to permit your arm full swing.

SWINGING THE TOPSIDE LEG

7. Bring your attention to your topside leg.
8. Bring the knee of that leg to your chest, bent tightly as if doing a high knee-kick.

⇒ Stretch the underside leg long.

⇒ Push the underside leg behind you.

⇒ Lift the underside leg slightly.

COMBINING THE ARM/SHOULDER AND LEG MOVEMENTS

9. As you draw your arm back as if to deliver a punch, draw your knee to your chest, as if to do a high-knee kick.

Lift your head to bring the back of your head and your shoulder close together, as you have rehearsed, before.

⇒ Stretch the underside arm forward.

Feel the muscles between your shoulders stretch open.

Feel how doing so helps you pull the other arm back.

⇒ Stretch the underside leg long.

⇒ Push the underside leg behind you.

⇒ Lift the underside leg slightly.

Feel how doing so helps you bring the knee toward your chest.

Feel the extravagance of this move. You are tightly coiled, ready to reach out.

10. Simultaneously reach your topside arm forward as you stretch your topside leg backward.

Feel your side stretch long.

11. Return to the coiled position.

⇒ Exhale.

12. Return to the stretched position.

⇒ Inhale.

13. Continue moving in the “**forward and up circle**”: your arm sweeps behind you; your leg swings forward, balancing you.

⇒ Continue to inhale.

Go slowly enough to do the movement in balance on the side of your ribs. Turn your head and torso as necessary to permit the movement.

14. Continue the sweep until your arm is at your side and your leg is straight.

⇒ Exhale.

15. As your arms sweeps forward, your leg sweeps backward.

⇒ Inhale.

Notice the feel of how the arm and leg counterbalance. Maintain that counterbalance as you move.

16. Continue the sweep until your arm moves backward until it is along side your ear and your leg is straight.

⇒ Exhale and rest.

You have completed one repetition of the Superscrunch.

After doing a few repetitions on one side, lie on your back and rest. Sense the difference in how the two halves of your body feel. Then, do the other side.

As you practice it, it will make more sense to you. Then, you will be able to incorporate some of the advanced variations. At the beginning, ignore the instructions for breathing (arrows); first, learn the general movements.

SUPERSCRUNCH, ADVANCED VARIATIONS:

Your feet

As you coil, contract the sole of your feet; as you reach, spread your toes and stretch open the soles of your feet.

Your jaws

As you coil, clench your jaws; as you reach, let your jaws go slack.

Your eyes

As you coil, squeeze your eyes shut; as you reach, open your eyes widely.

Your tongue

As you coil, press your tongue against the roof of your mouth and swallow; as you reach, relax your tongue.

FUN ON THE FLOOR

THE ROLLEE

This movement starts on momentum and continues on fun.

THE ESSENCE OF THIS MOVEMENT: getting into motion, keeping it up with momentum, like swinging on a swing, and enjoying rolling around

STARTING POSITION: sitting, soles of feet touching, legs open.

1. Both hands hold the feet.
2. Lean over to roll onto your side.
3. Continue rolling onto your back.
4. . . . onto the other side.
5. . . . into a sitting position.
6. Continue around and around.
7. Do the movement in reverse.

REVERSE ROLLEE

This movement also starts on momentum and continues on fun.

THE ESSENCE OF THIS MOVEMENT: getting a momentum going and enjoying spinning around

STARTING POSITION: on all fours

1. Roll onto the side of your thigh and hip.
Your hands remain down on the floor.
2. Keep rolling (onto your buttocks).
Swing around onto your hands.
3. Roll onto the side of your other thigh.
4. Keep rolling (until you are on all fours, again).
5. Keep rolling, around and around.

Do the movement in reverse.

The following two movements complement each other.

THE INCH-WORM

THE ESSENCE OF THIS MOVEMENT: feeling your spine curve and uncurve as you skootch across the floor

STARTING POSITION: on your back, knees up, arms lying by your head

1. Arch your back so your tailbone presses into the surface.
 ⇒ Inhale.
 ⇒ Allow your shoulders to slide backward/underneath you.
2. Push down with your feet so your hips lift up.
 ⇒ Exhale.
3. Let yourself down, vertebra by vertebra, from your shoulders, down toward your waistband.
 ⇒ Inhale all the way down.
4. Repeat the cycle.
 Let yourself inch across the floor.

VARIATION: (When proficient, alternate the variations.)

Position: same as basic variation.

1. Arch your back.
2. Reach beyond your head with straight arms.
3. Place the backs of your hands against each other.
4. With straight arms, swing your arms forward until they touch your belly.
 ⇒ Reach so you feel your shoulder blades separate and stretch away from each other, and your head lifts. Curl forward.
5. Lie back, one vertebra at a time.

THE ROCKIN' ROLLEE

THE ESSENCE OF THIS MOVEMENT: getting a forward-and-backward rocking momentum going, like a rocking chair

STARTING POSITION: on your back, holding your knees with your hands, knees together

1. Start yourself rocking by rocking your knees toward and away from your chest. Rock rhythmically, like a rocking-chair.
2. Add your head: Throw your head back to start yourself rocking back; throw your head forward to start yourself rocking forward.

The feeling is like being on a swing.

3. Once you get up speed, lift your hands about an inch and a half away from your knees and continue to rock.
4. Rock yourself all the way onto your feet, then, in a single motion, stand up.

MULTI-MODAL MOTION (ADVANCED VARIATION)

The somatic transformations improve coordination by connecting and synchronizing the movements of various body parts together. A higher degree of sensory-motor control can be gained in these movements by doing the related movements at different rates of speed: two of one motion for one of the other. It's about as easy as thinking and chewing gum at the same time. Let's use the Arch and Curl as an example.

ARCH & CURL (standard)

THE ESSENCE OF THIS MOVEMENT: *independent control of the movements of your pelvis and the rest of your torso; learning a more sophisticated way of moving that you can apply to other movements in this guidebook*

STARTING POSITION: *lying on your back, knees up, feet near your buttocks, fingers interlaced behind your head, elbows wide.*

1. Arch: SIMULTANEOUSLY:
 - Inhale.
 - Gently and gradually arch your back off the floor
 - press your elbows, the back of your head, and your tailbone down.
2. Curl: SIMULTANEOUSLY:
 - Begin to exhale.
 - Flatten your back.
 - Bring your elbows together.
 - Lift your head, and look at your knees.

MULTI-MODAL: (still curled)

3. Begin to rock your pelvis forward and back.
 - ⇒ As you rock your pelvis forward (waistline forward), inhale and let yourself lie back a bit.

4. As you rock your pelvis back (waistline back), maintain the position of your head and chest.

You are creating a kind of “racheting” effect.

5. With each rocking motion, let yourself lie back a bit further until you are all the way down.

MULTI-MODAL variation: (still curled from Step 2.)

3. Contract and relax the floor of your pelvis, using the muscles you use to control elimination.

Do this action until you feel from where you control it.

4. Now contract the floor of your pelvis and hold.
5. As you relax that contraction, and let yourself lie back a bit.
6. Recontract the floor of your pelvis and hold
7. Relax that contraction, and let yourself lie back a bit further.
8. Continue in this manner until you are all the way down.
9. Now, begin to arch backward. SIMULTANEOUSLY:
 - Gently tighten the small of your back.
 - Inhale.
 - Contract the floor of your pelvis.
10. Relax the floor of your pelvis.
11. Contract it again and arch backward a bit further.
12. Repeat until you are arched all the way back.
13. Curl forward, contracting and releasing the floor of your pelvis by stages, as you did earlier.

Many of the somatic transformations can be done multi-modally. Because multi-modal motion is a more sophisticated movement pattern, it should be practiced after you already know the basic movement pattern of the somatic transformation.

FAST MOVEMENTS

The following movements bring the coordination and control developed in the preceding movements into the rate of speed used in everyday actions. This change involves yet another dimension of integration: time.

PAWING THE GROUND

This movement awakens feeling and strength in the toes and sole of the foot. It defines the feeling of the front aspect of the foot. It is particularly appropriate after The Athletes' Prayer for Loose Calves.

THE ESSENCE OF THIS MOVEMENT: gripping the ground with your toes and pawing it, like a bull ready to charge

STARTING POSITION: leaning against a surface with your hands, one leg back, one leg forward.

1. The action starts with the hind leg. Grip the surface with your toes.
2. With a pawing motion, scrape the surface twice, in a backward motion using your big toe.

⇒ Feel the muscular effort in the back of the leg.

⇒ Feel the muscular effort in the back of the torso.

⇒ With each scrape, jerk your head back.

3. Repeat the movement, this time scraping with the second toe.

This movement entails turning the heel out, toes in a bit.

4. Continue to the next toe, two scrapes.

Continue this motion to a fully turned position, then reverse direction until your heel is turned fully inward.

Repeat with the other side of the body.

VARIATION: Do this maneuver without leaning against anything. Keep the forward foot down, stable, and balanced.

SPIRALLING FOR FREEDOM IN WALKING

ESSENCE OF THE MOVEMENT: twisting the two arms and shoulders in opposite directions with the head turned so the shoulder and nose meet

STARTING POSITION: standing, feet parallel at shoulder width, arms hanging freely

1. With one arm, reach forward, across and up. Your palm faces backwards, toward you.

Place your biceps muscle (upper arm, front) under your nose..

2. With the other arm, reach behind you so the palm of your hand faces up, elbow straight.
3. Bring your attention to both arms at the same time.
4. Reach up-and-across with the front-side arm and down and down-and-across with the back-side arm. ***Reach!***

As your reach with the arms, feel your ribs twist and bend to the side. Now, pause for a moment and really feel the position your whole body is in. Relax into it.

⇒ Exhale.

⇒ Turn your head as much over the shoulder of the front-side arm as you can, without forcing. The place between your nose and upper lip rests ***on or near*** the shoulder; find this position by “feel”.

⇒ As you reach with the arms, bend your knees, as if to sit, slightly.

5. Relax the reaching of your arms and switch sides.

⇒ Inhale, as you do so.

⇒ Turn your head toward the opposite shoulder.

⇒ As you unwind, straighten your legs to a full stand. As you wind to the opposite side, bend your knees, again.

Repeat to a satisfactory feeling when doing the movement. Now, walk!

INTEGRATING THE WAIST MUSCLES THROUGH ARM AND SHOULDER MOVEMENTS (“The Airplane”)

ESSENCE OF THE MOVEMENT: continuous, circular movement of the arms and shoulders moved as a single, straight unit

STARTING POSITION: standing, feet parallel at shoulder width, arms outstretched to the sides at shoulder height, knees straight

1. Lock your arms in position in a straight line.
2. Move one hand in a circle by moving the body at the waist.
Notice that the other hand moves in a circle, as well. Be sure to keep the arms straight. This movement originates at the waist, not at the shoulders.
3. Pick up speed until you feel constant momentum in the movement.
You feel the tension of the movement at the waist.
4. Tune the movement until your hands define circular circles.
5. Increase the speed until you feel your legs tighten and the movement affect your feet.
6. Continue until the body feels unified in the movement.

Reverse direction and repeat.

FINDING YOUR CENTER OF BALANCE (“The Helicopter”)

ESSENCE OF THE MOVEMENT: **relaxing into a tall, vertical alignment as you spin**

STARTING POSITION: **standing, feet close together, knees straight, arms hanging loosely at your sides**

1. Select a foot. That is the foot on which you are going to pivot.
The other foot is going to propel you into a spin.
2. Put your weight on the selected foot.
3. With the other foot, take a step, so you pivot around the heel of the “selected” foot of Step 1.
4. Take another step forward, pivoting on the other foot.
You are now beginning to twirl.
5. Gradually increase your speed until your arms lift of their own accord.
Relax any tensions you are acquiring; come to your full stature.
6. Continue to accelerate until you reach your maximum comfortable speed.
Relax your eyes, so the room seems to be smoothly passing across your field of vision.
7. Maintain the twirling at that speed until you are fully relaxed into it.
8. Gradually begin to decelerate.
Relax into the sensation of dizziness. Relax your arms.
9. Decelerate to a stop.
Relax into the sensation of dizziness. Come to your full stature. Breathe.
10. Switch your “selected pivot foot” and begin to reverse direction.
11. Accelerate and decelerate gradually, as before, to complete rest.

EPILOGUE

concluding ideas

Why Somatic Education is a Body-Mind Thing

Just as our actions demonstrate our intentions, our bodily state demonstrates our mental state.

This statement applies to states of dis-ease as well as to states of health. Stress level has been linked to susceptibility to disease through its adverse effects upon muscular tension, body chemistry, vitality, and immune-system functioning.

These scientifically-validated observations open the way for more profound implications that can be observed in ones own case: beliefs and attitudes affect our physical well-being. Consider how you feel coming home from a grueling work-day or during a life-crisis.

But this is “tip of the iceberg” stuff. Much more exists, unnoticed, below the surface.

In this case, the “surface” is the limit to our self-awareness, and the invisibility isn’t due to concealment, but to familiarity.

Our familiar attitudes, expectations, desires and refusals persist in us as states of readiness to feel and act in certain ways about and toward certain things. They persist as states of tension that never relax, but that are so familiar to us that we consider them to be “ourselves” and never notice them.

They are the “non-negotiables” of our existence.

They are states of body and mind that persist through time.

They are the “who we are” that is taking action.

They are the “foothold” from which we act.

They are our sense of “right” and “wrong”.

They are our sense of “problem” and “solution”.

They are what we feel we know.

They are our feeling of knowing.

To test these statements, recall how you feel when someone earnestly tells you something you know is wrong. You don't generally relax and agree with delight! You tense up, a bit, don't you?

Somatics deals with just those kinds of responses. It is the art, science, and self-study of feeling and action. It is not analytical; it is observational. It is felt.

Those who are involved in the body-mind arts and sciences, particularly in the healing professions, sometimes run up against conditions in their clients (and in themselves) that don't resolve as expected with treatment. Something has been missed.

That "something" is often the mass of attitudes and responses we call "the client" -- "who" they are. The roots of the problem *are* the person at the level of *personal* existence -- the personal attributes considered non-negotiable and socially untouchable in polite society. The problem is untouched because it exists in and as "the doer" rather than in what the doer/client or therapist is doing. It is the person's subjectivity, not the problem as they have conceived of it. Somatic education is about more than what a person is sensing or doing muscularly; it includes what they are *being*.

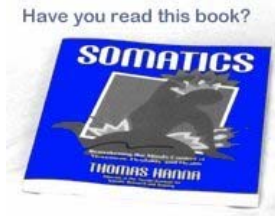
The client may notice these attitudes and qualities surfacing as emotions, confusion, or resistance during therapeutic (or educational) interactions. The therapist or somatic educator may notice them as the sense of difficulty in working with the person, as unusual difficulty in communicating with the client, or as feelings of overwhelm or fatigue.

When this is the case, a change of intention and procedure is necessary. No substitute will do. As a rule of thumb, what works is to have the client place attention on their sense of difficulty or emotional state (or resistance) and then alternate deliberately feeling it (while pandiculating) and then releasing the effort of feeling it (at the end of pandiculation), just as one would tense and relax a tight muscle. Very often, the difficulty will dissolve. When that occurs, the body changes.

That is why somatics is a body-mind thing.

ADDITIONAL RESOURCES

*Instructional audio and video-cassette programs and **Introductory workshops** on the **Somatic Transformational Exercises**.*



Somatics: Re-awakening the Mind's Control of Movement, Flexibility, and Health, Thomas Hanna's ground-breaking book redefines the potential for slowing or reversing the aging process and for eliminating chronic pain and stiffness. Theory, case studies, practical instruction in methods included.

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Outgrowing the Myth of Aging

guided by Lawrence Gold, certified Hanna somatic educator

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